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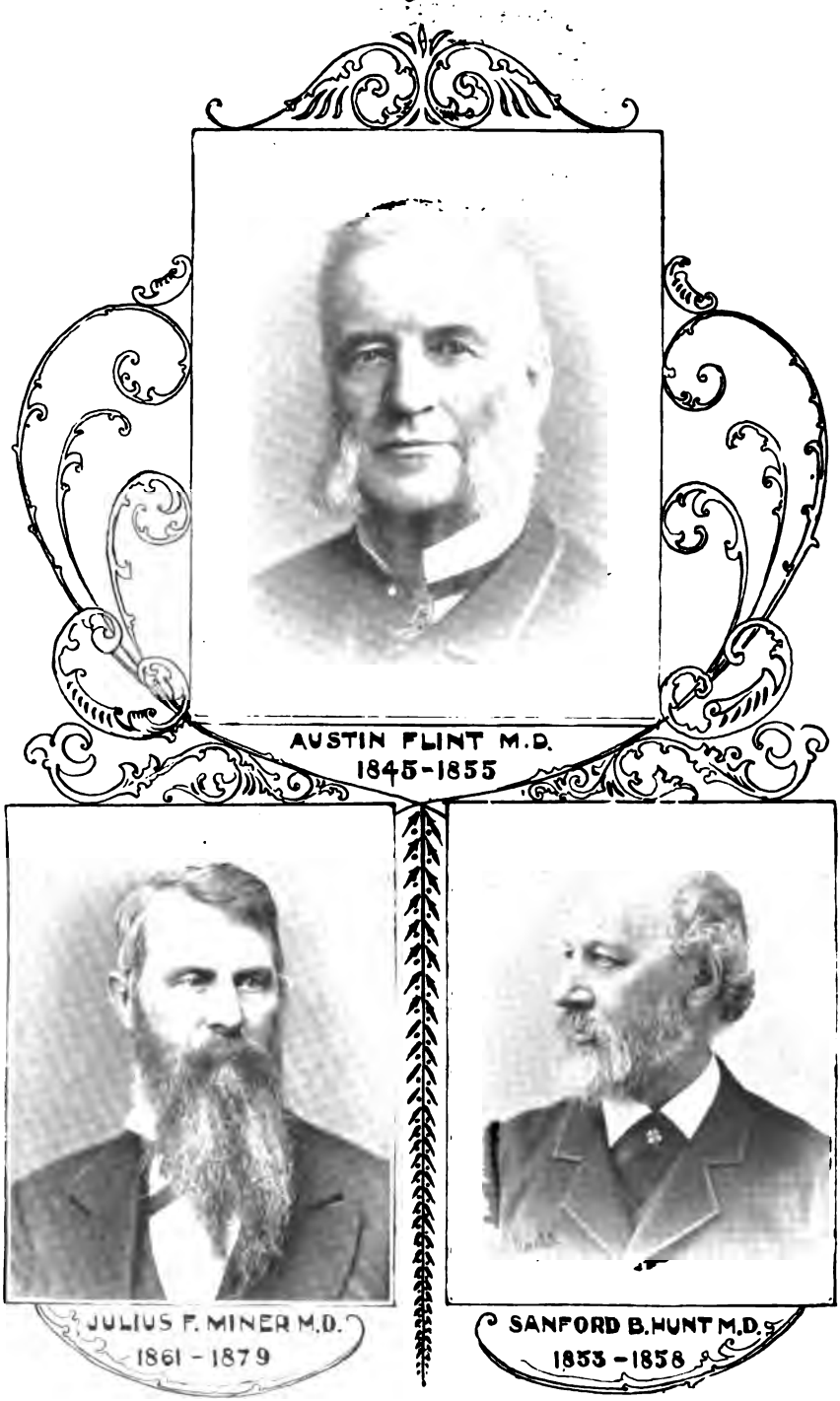

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Original Communications.

REMARKS ON CANCER OF THE BREAST.

BY HERMAN MYNTER, M. D., Buffalo, N. Y.,
Professor of surgery in Niagara University.

THE results of operations for cancer of the breast lately have been much improved. While Gross and Agnew stated that they had never cured a case and that they operated solely for the moral effect on the patient, the latest statistics of Halstead show a cure of 94 per cent. Even if his cases, perhaps, are of too recent occurrence to build reliable statistics upon, the improvement is surely so evident that it behooves us to inquire into the causes and we will find that, as in appendicitis, the decreased mortality depends upon a clearer knowledge in pathology and, consequently, a radical change in operative procedures. While, perhaps, the proof that cancer is an infectious disease dependent upon germs is still lacking and the germs or cells still unknown, it is well recognised that it is in the start a local disease, infecting the body through the lymphatics and that, therefore, an early operation offers the best chance for a radical cure.

The pectoralis muscle becomes affected early, according to Haidenhain. When the lymph channels once are invaded, the muscle soon becomes involved, even while the tumor is yet freely movable. If the muscle once is attacked, the cancer cells, or whatever they be, spread by muscular contractions through the whole muscle.

The former belief was that all the lymphatics passed through the axillary glands. Volkmann and others, however, have demonstrated that there is an intricate network of lymphatics on the surface of the pectoralis major muscle and upon the upper side of the fascia; even that there is a connection of the lymphatics of the

right and left breast; that the lymphatics under the pectoralis major and minor in the subclavicular region, in the sulcus bicipitalis, along the axillary vessels and other places may become infected. All these regions have to be considered in a modern operation for cancer of the breast, and it is no longer sufficient to remove the tumor and the axillary glands.

MYNTER—CANCER OF THE BREAST.

The not infrequent recurrence, with increased malignity, following an amputation of the breast is probably the result of rough handling of the tumor during the operation, by which cancer cells are forced into the lymphatics. The earlier operation consisted simply in extirpating the tumor.

Küster was the first to advocate cleaning out the axilla in every case. Volkmann went a step further in removing the fascia

covering the pectoralis muscle. Gerster proposed to attack the axilla first in order to cut off the lymph channels before handling the tumor.

Two American surgeons, Halsted[1] and Willy Meyer,[2] have during the last year, independently of each other, advocated a more radical operation, removing in one piece pectoralis major and minor, the whole breast, the contents of the axilla and the sub- and infraclavicular region. Of these two operations I consider Meyer's the easiest and anatomically the most correct, as the lymph channels are cut through at the beginning of the operation, and infection from handling the tumor is prevented. The loss of the pectoralis major muscle does not seriously interfere with the use of the arm as the anterior portion of the deltoid muscle partly compensates the lost muscle. The whole breast should be removed in each case, no attention being paid to the loss of skin. In two recent cases I successfully skingrafted the enormous defect down on the very ribs, at the time of operation, and the patients left the hospital recovered in about two weeks.

As long as a recurrence can be removed by the knife it ought to be done, provided there is no systemic affection of internal organs. There is almost no limit to operative proceedings, life will be prolonged even if a cure is not obtained and much misery and suffering avoided. In this connection I wish to report a case:

Mrs. H., 53 years of age. She had her left breast removed by caustics nine years ago. One year later she came to me with a large relapse in the scar and glandular enlargement in the axilla. I made as thorough an operation as was possible at that time. She has since had six relapses in the axilla, each of which I removed with more and more difficulty on account of the cicatricial retraction of the axillary tissues, the last operation being done in October, 1893. She again entered the Sisters' Hospital in March, 1895, in a deplorable condition, the left arm being three times the size of the right on account of pressure of a relapse on the axillary vein. The axilla was occupied by a hard immovable tumor as large as a fist and inoperable by the usual methods. A hard infiltration was felt under the clavicle up along the nerves and vessels. She suffered excruciating pain from the affection of the nerves and was obliged to take morphine in large doses continually. She was willing to submit to any operation by which her life could he lengthened and her misery abated. It was impossible to get at the tumor on account of the enormously swollen arm, which could not be abducted on account of the scars in the axilla, and it was necessary, therefore, to exarticulate the arm as a preliminary operation.

Having first ligated the subclavian artery and vein in their third division I exarticulated the arm, saving only a large outside flap consisting of skin and deltoid muscle. I thereafter removed the tumor and all contents of the axilla, skin included, cleaned out completely the infraclavicular space with the infected nerves and vessels, removed the pectoralis muscles and covered the axillary defect with the deltoid flap. The operation was absolutely bloodless. The patient left the hospital recovered in fourteen days, relieved of the pain, eating well and rapidly increasing in strength. [See illustration, p. 2.]

I have never heard of this operation having been done before and, therefore, report it here.

1. *Annals of Surgery*, November, 1894.
2. *Medical Record*, December 15, 1894.

566 DELAWARE AVENUE.

INFANTILE SCURVY.

BY IRVING M. SNOW, M. D., Buffalo, N. Y.,
Member American Pediatric Society ; Physician to Buffalo Fresh Air Mission Hospital.

IN FEBRUARY, 1894, I was called to see a sick baby in the family of a well-to-do German contractor. My patient was the youngest of several children. The mother nursed the baby for one month and afterward fed it on a proprietary dried milk food. Nevertheless the baby had always been delicate and ailing and had never taken its food in a satisfactory way. Still, for a number of months it had no cough or diarrhea nor did it suffer from any acute infectious process. At the age of eleven months the mother noticed that the baby's limbs were very tender and that it cried when she handled or bathed it. From this time on the child grew weaker and more fretful. It was with difficulty induced to take its bottle, slept but little and lay with its legs flexed upon the abdomen. Notwithstanding the child's failing health dentition pursued its normal course, the teeth appeared in regular order during the tenth, eleventh and twelfth months. About February 1st, the baby being over a year old, the family physician found that there was an extensive livid swelling of the gums of the upper jaw. This swelling rapidly increased, the gums bled freely at the slightest touch, the breath grew fetid and a foul-smelling nasal discharge appeared. After this the general condition of the child grew more unfavorable, it refused to swallow and became continually weaker and more apathetic.

As the mouth symptoms resisted all treatment the family physician, thinking that he might have to deal with a cancrum oris, or a necrosis of the alveolar processes, called a surgeon in consultation. The surgeon examined the mouth and refused to interfere, declaring that operative treatment would do no good.

On February 19th I was called in consultation. The child was lying languidly in its mother's arms. On our entrance into the room it set up a piteous wail, evidently anticipating that our object was to hurt her mouth. She was of good length, but emaciated to the last degree, weighing only thirteen and one-half pounds, although thirteen months old. The temperature was 100°; pulse, 120, weak; the face and skin were of a sallow, muddy pallor; the lips were white; a few purpuric spots, the size of a pin's head, were scattered over the body, arms and legs.

But it was about the mouth that the whole interest of the case centered. On the upper jaw there was an enormous fleshy swelling of the gums. This swelling bulged downward, covering two-thirds of the free surface of the incisor teeth. A similar puffiness was seen about the site of a molar that had fallen out the day before. There was an extensive ecchymosis on the gums on the left side of the lower jaw, while the gums themselves were livid in color and bleeding freely. The mucous membrane of the rest of the buccal cavity was of normal color and free from exudate. No enlargement of the cervical glands was present. On the thorax there was well-marked rachitic beading of the ribs. The legs were thin and flabby, but at this time they were not swollen or tender on manipulation. Just before the consultation the child had vomited blood, which probably came from the diseased gums. A condition of constipation was, perhaps, caused by the semi-starvation of the child. As to the previous treatment the baby was taking a dried milk preparation for food, the medication was iron and gentian, cod liver oil, brandy and chlorate of potash. The family physician, believing that the child was suffering from blood poisoning, had given a most unfavorable prognosis and the parents had lost hope for the baby's recovery.

To review the case—a child reared on a dried milk food was dying of inanition with swollen, bleeding gums. The puny condition of the baby during the first year of life was due to rickets caused by taking a food rich in starch and poor in fats. After ten months of this fare scorbutic mouth symptoms appeared.

I made a diagnosis of infantile scurvy and in spite of the desperate condition of the child told the mother her baby would certainly live. I ordered orange juice, mashed potatoes and a cream mixture to displace the proprietary food. All drugs and antiseptics to the mouth were discontinued. Four days afterward I again saw the child, a great improvement had taken place, the orange

juice was greedily swallowed, the baby crying for more. Through some misunderstanding the potato was not given. There was also a noticeable increase in strength, the baby was no longer tender to handle, it sat up and viewed passing events with interest. The mouth was well, the swelling had subsided, no bleeding from the gums had occurred in two days. My diagnosis was proven by the therapeutic test,—recovery after the use of antiscorbutics.

In other ways the baby gained more slowly. The emaciation and digestive disturbance were too grave to disappear at once, yet in a month, with absolutely nothing but dietetic treatment, the child was practically well. Such is the history of the only case of infantile scurvy as yet reported in this city.

Infantile scurvy cannot be regarded as a common malady in this country, as Dr. Northrup, in February, 1894, after an extensive correspondence, was able to collect only 106 American cases.

I have invited attention to a disease whose etiology is understood and whose treatment has been perfected. The cause is probably biological and chemical,—deprivation of fresh food. A cure follows the administration of fresh fruits, vegetables and meat.

In 1883, Drs. Barlow and Cheadle first proved that scurvy occurred among infants in cities as well as among seamen. A baby, even amidst luxurious surroundings, may as easily develop scurvy if it be fed on a dried milk food or condensed milk as a sailor from eating salt pork and hard tack in the polar seas. As a result of a high civilisation the disease has disappeared among sailors, but is now found among the children of the well-to-do. Nearly all cases of infantile scurvy have been discovered in wealthy families, where the parents were able to buy expensive proprietary foods of malted grain and dried milk.

Poor children are given potatoes, an admirable antiscorbutic, and other articles of adult diet at a very early age. It is reasonable to suppose that infantile scurvy is steadily on the increase, as the operating cause, feeding of babies on patent foods, grows more frequent. As I believe that scurvy in children is occasionally overlooked and as a knowledge of its symptoms may be the means of saving life, a review of the various phases of the disease may not be amiss.

Scorbutic babies are generally rachitic; not that rickets is a part of the disease, but simply exists as an associated condition.

At first scurvy was confused with rheumatism on account of the swelling and tenderness of the limbs and joints, hence the con-

dition was long known to the Germans as acute rickets. The German cases were described as swollen, tender limbs in rickety babies. No mouth symptoms were present.

Scurvy has been mistaken for purpura hemorrhagica from the ecchymosis of the skin, or for a stomatitis from the bleeding and sponginess of the gums. Older children occasionally develop scurvy. They are on an adult diet, but show a curious hysterical dislike to fresh fruit and vegetables. No well authenticated case of scurvy in a breast-fed baby is recorded. An infant nursed by a scorbutic mother may develop scurvy.

The symptoms of the disease are found (1) in the mouth and (2) in the limbs. With babies the classical signs of scurvy do not always develop in regular order; thus a baby may have spongy, swollen gums and no pronounced limb symptoms, as in my case, or there may be tense painful swelling of the limbs with no mouth symptoms, or both regions may be simultaneously affected.

As a matter of fact the sore gums are frequently absent in young infants with no teeth. For this there is a physiological reason. Before the eruption of the teeth the gums have a scanty blood supply and there is relatively little nutrition. Each tooth adds a new lease of blood-vessels to the mucosa of the gums. Almost invariably there is a progressive sallow anemia, caused by recurring hemorrhage, with languor, faintness and other evidences of cardiac weakness. The children affected are often fat and would be called well nourished. The temperature is exceedingly erratic; it may be febrile, normal or subnormal. Vomiting and diarrhea are seldom observed.

The primary scorbutic bone lesion is a hemorrhage between the actively growing periosteum and underlying bone. A thin sheath of blood-clot surrounds the shaft of the bone. A hard, brawny swelling in a thigh or leg is due to an effusion of blood in the deeper layers of muscles or serum into the superficial layers. There is neither local heat nor feeling about the swelling. A loss of power in a limb or a pseudo-paralysis may be the result of the separation of an epiphysis, or caused merely by pain on moving the leg.

Among the most curious features of infantile scurvy is a black eye from a hemorrhage into the loose tissue of the lid, or proptosis bulging of the eyeball from a bloody effusion into the orbital periosteum behind the eye. Extensive purpura, visceral hemorrhages, epistaxis or hematuria have been observed.

Numerous fatal cases of scurvy are recorded, the condition being recognised only when the child was moribund or dead; the post-mortem findings being intramuscular, visceral or subperiosteal hemorrhage.

It is interesting to note that scurvy does not quickly develop in a baby fed in the most irrational manner; the organism seems to live on its fresh tissues for a while. If the disease be untreated, its duration is from two months to four months, and terminates either in death or a slow recovery, as by accident antiscorbutics are given.

Lastly, it is probable that we see and pass unrecognised numerous borderland cases in rickety babies; they are tender to handle and irritable out of all proportion to the signs found. A final diagnosis is made by the therapeutic test, a rapid cure following the use of living food, orange juice, potatoes, meat and fresh milk.

The following case is illustrative:

A child with scurvy was received by Dr. Cheadle into the Great Ormond Street Hospital for Sick Children. The spongy swelling of the gums was so characteristic that Dr. Cheadle determined to have a sketch made. The day was Friday, the artist could not come until Monday. In the meantime the patient was given potato, raw meat, fresh milk. When the artist appeared, three days after he was summoned, the child was so much better, the swelling had so completely subsided that the sketch was abandoned.

476 FRANKLIN STREET.

A CASE OF SPINA BIFIDA TREATED BY OPERATION, INCLUDING CLOSURE OF THE SPINAL CANAL BY A CELLULOID PLATE.

BY ROSWELL PARK, A. M., M. D.,
Professor of surgery, Medical Department, University of Buffalo.

KATE STIGLER, *æt.* 5 months, was brought to my clinic at Buffalo General Hospital by Dr. Hitzel, of Buffalo, in March, 1895. As the accompanying illustration will show, there was a thin-walled, elastic, fluctuating tumor located centrally over the lower part of the spinal column. So thin were its walls that on holding the child up to the light the tumor proved translucent, as does a hydrocele when similarly treated. It was verynearly the size of a split hen's egg. Evidently a spina bifida, the tumor consisted apparently of a meningeal protrusion covered simply by integument, although around its base there was some fatty tissue, irregularly distributed. Even in front of a powerful light

I could not definitely make out whether any nerve trunks were adherent to its external aspect or not. Patient's general condition excellent, there being neither ulceration nor abrasion of the skin in the neighborhood. The tumor was growing relatively considerably faster than the child, and, since there was no present infection of its sac nor any imminent danger of it, I proposed operation, to which the parents consented.

PARK—SPINA BIFIDA.

This was made March 18, 1895, in my clinic, the child being anesthetised with ether. The operation consisted in complete extirpation of the external portion of the sac, its central and most protruding area being excised by an elliptical incision. The neck of the sac was found relatively small, and the defect in the bone involved apparently three of the infant's vertebral arches. Project-

ing into the general cystic cavity was a polypoid protrusion, composed apparently of spinal pia and arachnoid. This arrangement, then, was of one sac projecting into another, in which it floated. Inasmuch as this inner sac contained no visible nerves, nothing but membrane and fluid, its neck was ligated at its exit from the spinal canal, the protruding part excised, and the ligated stump tucked back into the canal. Into the osseous defect—in other words, into the opening into the spinal canal—I now fitted a thin piece of celluloid which had been carefully sterilised and cut in such a way that, by a little manipulation, I could spring its edges in under the bony margin, which I freshened for the purpose of retaining and holding as firmly as possible this new material. After carefully inserting it and satisfying myself that it answered the purpose of a posterior wall perfectly, I closed over it the stump of the main sac with catgut sutures. Over this, again, the external tissues were held firmly together by a series of buried catgut sutures, until the wound was completely closed and a straight suture line took the place of the old protrusion.

I took pains to operate with the child in the position of the down-hanging head, in order that no more cerebro-spinal fluid might be lost than was contained in the sac. As the result, in some measure, of this precaution, the child stood the operation very well and displayed scarcely any signs of shock. On the seventh day the first dressing was made, at which time a little watery accumulation was released. Cultures were made from this fluid and were found to be absolutely sterile. Upon the second dressing, five days later, the parts were absolutely dry and apparently securely healed. There has never been a bad sign, and recent reports from the child indicate that it is in as good condition as any child of its age.

This case report will illustrate one of the recent and successful methods of dealing with a serious congenital lesion. It is applicable, however, only to cases of a selected character, and preferably to those where the defect in the bony arches is relatively small. It will go without saying that such an operation must be done under rigid aseptic precautions, to which end it is vastly preferable to get hold of such a case before there has been any ulceration of the skin, or anything like the formation of pressure sores. The operation of excision of the tumor is by no means new, but has been done many times. Mayo Robson has succeeded in a number of instances, as have others, in transplanting into the osseous

defect periosteum with its entangled osteoblasts, from the bones of a rabbit or other animal. Osteoplastic operations have also been suggested and devised by other operators, all of which entail more handling and more uncertainty of result. A *résumé* of the various methods of attacking these cases, with allusion to a relatively large number of cases with results, was published by Marcy in the *Annals of Surgery* for March, 1895. Until very recently, however, it has not been thought feasible to insert into the spine plates of protective material,—metal, celluloid, etc.,—as has often been done within the cranium.

For the purpose of closing cranial defects, both heteroplastic and autoplastic methods have been described by many surgeons. In 1820, Walther replaced a resected portion of the skull with partial healing. In 1868, Wolff attained pretty uniform success in reimplanting bone in animals. Macewen, Weir and others then recommended the sewing of bone fragments over the dura. This has been practically discontinued. Then transplantation experiments were made with different animals, and in 1889 Seydel transplanted bone from the tibia of a patient to the skull, replacing that which had been lost as the result of a compound injury. Poncet resorted to bone removed from the skull of a newborn infant dead of asphyxia. Decalcified bone was suggested by Senn and by Kummel. Hinterstoisser reported most encouraging success with celluloid. Gerstein has employed rabbit bone and ivory, and aluminum and other materials have been recommended by yet others.

Following Beach, of Boston, I have a number of times inserted gold-foil between the pia and the dura to prevent formation of adhesions at this point. A thicker specimen of the same metal might easily be used for the purposes of reinforcing or affording strength. Strange stories have been circulated among the laity as to the use in time past, even centuries ago, of metal and glass plates for the same purpose, but these stories are almost invariably creations of a vivid imagination. Certain it is, however, that within the past few years we have learned that various foreign materials, sterilised and made inert, can be introduced within the human body for certain purposes among which are those herein indicated. Probably the most generally serviceable will be celluloid, of the use of which I herewith record an example. There is every reason, in the case I have described, to expect the perfect encapsulation of this plate and its incorporation into the tissues to

an extent permitting of the perfect performance of the duty which I thus imposed upon it.

510 DELAWARE AVENUE.

THE HISTOLOGICAL CONFORMATION OF THE MEDULLA.[1]

BY WILLIAM C. KRAUSS, M. D., F. R. M. S.,

Professor of nervous diseases in the Medical Department of Niagara University, Buffalo, N. Y.

THE study of the transition of the cord to the brain is perhaps the most difficult task in the anatomy and histology of the nervous system. To trace the origin and direction of nerve bundles, the appearance of new masses of gray matter, and the coalition of different tracts requires much time, excellent specimens, correct drawings and careful explanations. The discovery of the Weigert method of staining and the Pal modification has proved of great benefit in following these complicated changes, and permitted the investigator to trace the course of the different tracts with much satisfaction and success.

The internal configuration of the spinal cord from the third or fourth lumbar segment to the second or third cervical is practically the same. Slight changes occur characteristic of the lumbar, thoracic and cervical regions, such as the development of the dorsal cornua, or lateral cornua, or of the ventral cornua; but these are of minor importance when compared to the changes occurring between the first and second cervical segment at the beginning of the pons.

The spinal cord within the limits referred to consists of a cylindrical mass of nerve elements held together by neuroglia cells and encased in appropriate membranes, lending support, protection and nutrition. The white matter, composed of medullated nerve fibers, is arranged peripherally, while the gray matter containing the ganglion cells is situated in the interior. The gray matter consists of two crescentic masses, their convex surfaces facing and connected together by a bridge of gray matter, the commissure; the whole resembling very much the letter H. The gray matter is divided arbitrarily into dorsal, lateral and ventral cornua, and anterior gray commissure inclosing the spinal canal. From the dorsal and ventral cornua bundles of nerve fibers pass through the

white matter to the periphery of the cord, forming the dorsal and ventral spinal roots.

The white matter is divided into two hemispheres by the dorsal and ventral fissures, and each hemisphere is separated into dorsal, lateral and ventral columns. These columns are further subdivided as follows: the ventral, into the columns of Türck and ventral columns proper; the lateral, into the pyramidal tracts, cerebellar tracts (Flechsig), and tracts of Gowers; the dorsal, into the columns of Goll, columns of Burdach and Spitzka-Lissauer tracts. These subdivisions are mapped out according to the part they play in conducting nerve impulses to or from the brain centers. The continuation of the cord caudad, is the cauda equina; cephalad, the medulla.

From about the middle of the thoracic region fibers pass from the pyramidal tracts in the lateral columns through the base of the ventral cornua to the ventral columns of the opposite side. This decussation is scarcely recognisable at first, but gradually increases cephalad until the first cervical segment, when the remaining fibers not yet decussated pass to the opposite side in bundles, severing the ventral cornua from the central gray matter and pushing them laterad. The lateral cornua become prominent, and from their cells originate the XI. pair of nerves (spinal accessory), passing through the white matter and emerging at the side of the medulla between the dorsal and ventral roots.

While these changes are going on in the ventral and lateral columns the dorsal columns increase in size, the funiculi graciles (tracts of Goll) and funiculi cuneati (tracts of Burdach) develop, pushing the dorsal cornua before them. The long slender bodies of the dorsal cornua swell, enlarge, become rounded and are connected to the central gray matter by thin pedicles. The substantia gelatinosa Rolandi becomes prominent, and medullated nerve fibers arise adjacent and ectad, passing cephalad as the ascending branch of the trigeminus. The formatio reticularis develops in the lateral columns, appropriating to itself the severed portions of the ventral cornua, except some small aggregations of nerve cells surrounded by patches of gray matter, the most important of which is called nucleus lateralis medius or nucleus ambiguus.

Further cephalad there arise in the funiculi graciles and cuneati, small masses of gray matter containing isolated groups of ganglion cells designated nuclei funiculi graciles and nuclei funiculi cuneati. The decussation of the pyramidal fibers being completed and the

pyramids fully developed, other fibers may be observed coming from the former dorsal columns, passing concentrically about the central canal and decussating ventrad of it, then arranging themselves on both sides of the ventral fissure dorsad of the pyramids forming the lemniscus.

The continuance of these fibers, now designated fibræ arcuatæ internæ decussate in the median line, from the central canal to the ventral fissure forming the raphe.

In the lateral regions immediately dorsad of the pyramids small masses of ganglion cells, symmetrically arranged, begin to appear as convoluted intestinal-like masses called the olivary bodies. Generally there are two or three of these bodies present besides the principal ones, and to these have been given the names internal and external accessory olivary processes.

The central canal, at first circular, has become elliptical, and traced cephalad it widens out, rises to the dorsal surface and terminates in the calamus scriptorius, then into the fourth ventricle. In the base of the ventral cornua a group of large multipolar ganglion cells appear, the nucleus of the XII. pair or hypoglossal nerves. The nerve fibers coming from these cells pass ventrad through the formatio reticularis, between the olivary bodies and the pyramids, and emerge exteriorly, laterad of the pyramids. In the base of the dorsal cornua, now pushed latero-dorsad and appearing as the gray matter in the floor of the fourth ventricle, appear masses of small ganglionic cells, the nuclei of the X., IX., and VIII. pairs of nerves.

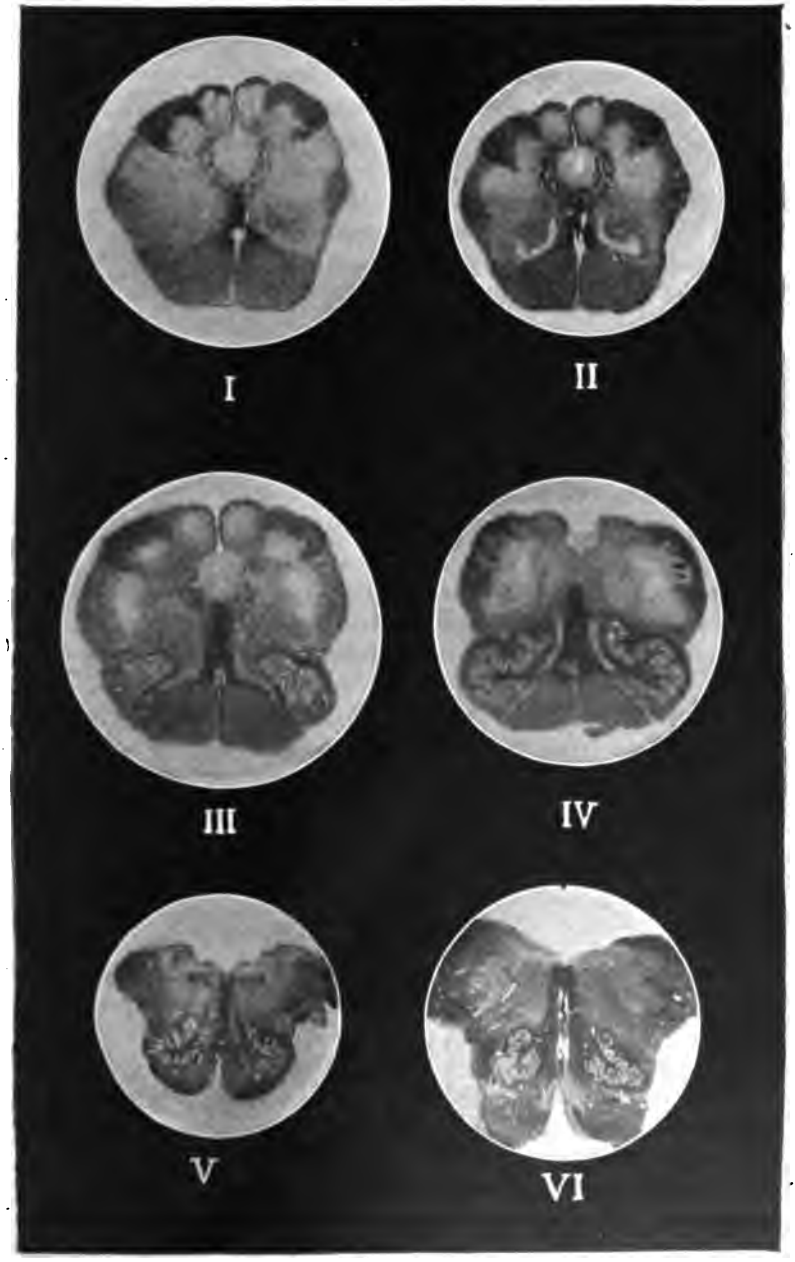
The cerebellar tracts or tracts of Flechsig have joined with other fibers coming from the dorsal and lateral columns and pass cephalad into the cerebellum as the corpora restiforme.

In the floor of the fourth ventricle, close beside the median raphe, a small group of ganglion cells may be observed—the nucleus funiculi teretis. Ventrad of these cells an oval bundle of nerve fibers passing cephalad may be seen, called the fasiculus longitudinal posterior.

The next important change is the appearance of the transverse bundles of fibers forming the pons, and with the appearance of these fibers the medulla ceases its existence.

EXPLANATION OF PLATE.

Fig. 1.—Transection of the medulla at its junction with the cord (first cervical segment), showing the decussation of the pyramidal tracts


I
II
III
IV
V
VI

and formation of the pyramids. In the dorsal columns may be seen the newly-formed funiculi cuneati and graciles, and in the lateral columns the origin of the fibers of the ascending branch of the trigeminus nerve. Magnified two and one-half diameters.

Fig. II.—Transection of the medulla one-half centimeter cephalad of Figure I., showing the decussation of fibers (sensory) coming from the funiculi cuneati and graciles, forming the lemniscus. Laterad of the lemniscus appear the olivary bodies. Magnified two diameters.

Fig. III.—Transection of the medulla one-half centimeter cephalad of Figure II., showing the fibræ arcuate internæ decussating and forming the raphe. The olivary bodies are more developed, and the spinal canal may be seen to gradually ascend to the dorsal surface, where, further cephalad, it terminates in the calamus scriptorius, then into the fourth ventricle. Magnified two and one-half diameters.

Fig. IV.—Transection of the medulla one-half centimeter cephalad of Figure III., showing the calamus scriptorius. The olivary bodies and the accessory olivary bodies are now plainly visible. Magnified two diameters.

Fig. 5.—Transection of the medulla one centimeter caudad of the pons, showing the floor of the fourth ventricle, the development of the restiform bodies, the fibers of the hypoglossal nerves separating the substantia reticularis alba from the substantia reticularis grisea, and the ascending branches of the glosso-pharyngeal nerves. Magnified one and one-fourth diameters.

Fig. VI.—Transection of the medulla one-half centimeter caudad of the pons, showing the fasiculus longitudinalis posterior in the floor of the fourth ventricle and indistinctly the emergence of the fibers of the vagus nerves. Magnified one and three-fourth diameters.

The nuclei of the XII., XI., X., IX., and VIII., pairs of cranial nerves are situated in the medulla embraced by these sections, but on account of their being rendered transparent by the Pal method, cannot be distinguished.

1. Illustrated by a series of six slides, to which was awarded the cash prize of the American Microscopical Society, held at Madison, Wis., Aug. 19-21, 1893.

IMPACTED CERUMEN.—To dislodge hard, impacted wax from the ear, Dr. Dundas Grant (London), *Medical Times or Hospital Gazette*, recommends a solution, consisting of fifteen grains of bicarbonate of soda, three drachms of glycerine and distilled water to make an ounce; to be dropped into the ear, warm, followed by persistent syringing.—*Hot Springs Medical Journal.*

A STUDY IN HEADS.

By JULIUS POHLMAN, M. D., Buffalo, N. Y.,
Professor of physiology, Medical Department, University of Buffalo.

THERE was a time not very long ago when phrenology was fashionable and accepted by a fair majority of mankind as a certain method to determine any latent ability or capacity in men, women and children. There was a time when parents took their offspring to the "Professor" to be told that the boy had in him the making of a Webster, a Grant or a Lincoln; or that the girl would shine as a great leader of fashion, of thought, of society. Fathers, and more so mothers, were willing to pay high fees to have their vanity tickled, for who would not willingly sacrifice something to know that his or her boy or girl would outshine anybody else's boy or girl? The absurdity of the thing which presupposed that the "Professor," a perfect stranger, could, by merely looking at the child, tell the parents something about that child's ability which they had not yet discovered themselves, did not appear until later.

As the scientific localisation of brain functions progressed, phrenology has been relegated to the curiosities of the past, but yet we run across stray remnants of it quite frequently, and probably the commonest form of these is the often-heard saying, "what a fine head!" Just as if the head in its totality had any more to do with the mind inhabiting that head, than the town-lot-like arranged map of the phrenologist had to do with the determination of brain functions.

The question, "what is a fine head?" is yet to be answered, and the following note may add a trifle to the interest involved in both question and answer.

As this is a Buffalo number to celebrate the jubilee of a Buffalo journal, this study has been based on heads of Buffalo citizens, successful men excepting one, No. 4, and more or less well known.

Messrs. Georger & Co., the well-known firm of hatters and furriers, have for years collected a large series of forms of heads incidental to their business, and from this collection the following groups have been selected as fair types of large numbers of others. The figures are all drawn with the forehead toward the upper edge of the page and their right and left sides on the right and left side of the reader.

Group I.—These are fair types of dolichocephalic heads. Nos. 1 and 2, Germans; No. 3, an American—merchant, grocer and

merchant respectively. No. 4 represents the head of a young German normal school student who constantly suffered from nervous troubles.

Group II.—This group represents heads with a more or less pointed occipital region—heads in which the posterior one-third is smaller in area than either one of the other thirds. What a lovely type of prize-fighter, according to phrenology, No. 5 would be with the temporal regions so excessively developed, but Mr. W. is a peace-loving young German of a meek and amiable disposition; No. 6 is a German merchant; No. 7 an American lawyer, and No. 8 an American lawyer and judge of high and well-deserved fame.

Group III.—These four specimens can well be called types of round heads—all Germans. Nos. 9 and 12 merchants; No. 10 an organist and composer, and No. 11 a physician.

Group IV.—Nobody will care to contradict the statement that Nos. 13–16, in group IV., represent very irregularly shaped heads. No. 13 is a real estate dealer of Irish parentage; No. 14 a German liquor dealer; No. 15 a German teacher of high standing, and No. 16 a German mechanic, a man of artistic tastes, a fine shot and sportsman.

It is very tempting to speculate upon the "whys" of these different forms of heads. The only thing certain, however, is that fifteen out of these sixteen represent good citizens and men successful in their respective occupations. Nevertheless, it cannot be doubted that if the skulls from which the above drawings have been made had been exhumed from some pre-historic burial-ground, the anthropologists would be greatly puzzled to determine the racial affinities and the mental caliber of the men whose remnants they were examining.

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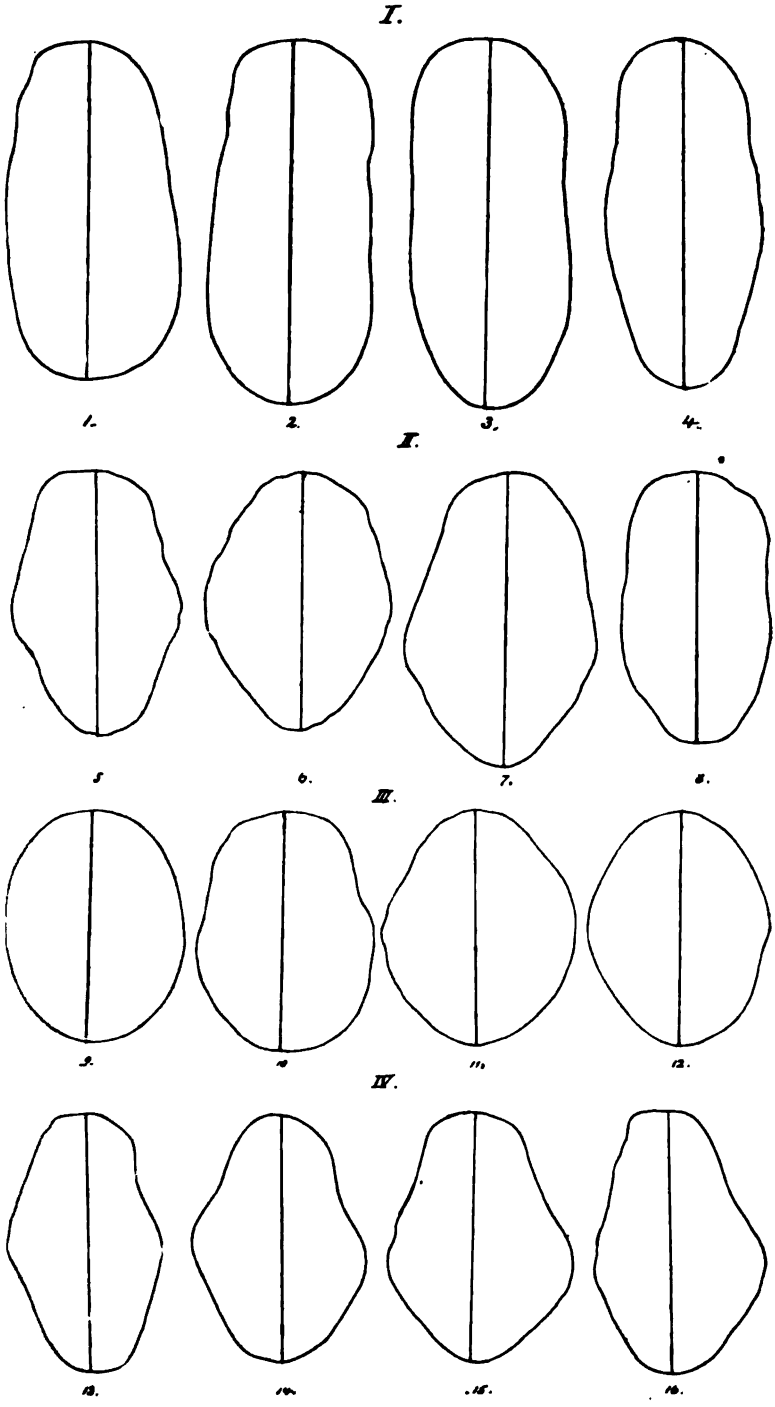
ECTOPIC PREGNANCY.

BY HENRY D. INGRAHAM, M. D.,
Professor of gynecology, Niagara University, Gynecologist to Buffalo Hospital of the Sisters of Charity.

IT IS not often in ectopic pregnancy that the physician is consulted before rupture occurs. In fact, most of the patients whom I have seen do not think there is anything unusual with them until rupture happens, except that possibly they may be pregnant; yet often this is not suspected, and when rupture takes



POHLMAN—A STUDY IN HEADS.

place they may be even more doubtful in this respect than before.

If the rupture occurs as early as the fourth or fifth week, the patient does not usually suspect pregnancy; she only thinks that she has "gone past her time a few days, as she often does." And then when the slight, bloody, shreddy discharge occurs, she is sure that she is not pregnant, and that the discharge is a disordered menstruation, due to a cold or to overwork. It is also evident that many physicians fail to recognise the difficulty and the patient passes beyond the reach of medical or rather of surgical aid before the true condition is discovered. Such a case I saw last winter.

I was called in consultation to see Mrs. X., a large, strong, well-developed woman, 24 years of age. She had been married two years; had always been in good health until four weeks previously. Since then she had suffered much from pelvic pain, which was excruciating each time her bowels moved. Sometimes there was considerable abdominal distention for several days, then it would mostly disappear. She was pale, anemic; had a slight fever part of the time, the temperature never being more than one or two degrees above normal, and that was not constant. She was dizzy when she sat up, nauseated part of the time and had a poor appetite. Did not sleep well, was restless, partly from pain and partly from a restless indescribable condition, was thought to be very nervous or hysterical, although she had never been considered so before. Such was her condition when I saw her, yet at times she had been better, had been able to be up about the house some of the time, and, in fact, had been out on the street on two different occasions. Once she walked a mile, the other time nearly two miles, although walking was very painful, and she returned home exhausted each time and was much worse for several days.

Upon obtaining a correct history of her case I found that she had menstruated quite regularly for the past ten years. Everything normal, except sometimes slight pain; never had any uterine disease. Ten weeks before I saw her she had menstruated normally. At the time of the next regular period she did not menstruate, but two weeks later—six weeks after her last period—she began to have a slight flow which had been present most of the time since, although some days it was scanty and at no time as free as the usual menstrual discharge. Neither was it like it, but more shreddy and mucus, and brighter in color. I also learned that just about the time the flow began, one afternoon, while sitting quietly in her chair, she was seized with a very sharp, cutting pain in the left iliac region, was faint and nearly fell to the floor.

She was assisted to the bed by a friend who said she was very pale; for two or three days she was unable to sit up or to raise her head on account of being faint and dizzy, but this gradually wore away, as did the pain in the side, yet none of these symptoms entirely disappeared and at times they were much worse. Upon examination a boggy mass, fully half as large as the closed fist, could be felt at the left and posterior to the uterus. It was very tender and sensitive, and the patient experienced the same pain when it was touched as when her bowels moved. From the examination and the history of the case, there was no doubt in my mind that it was a case of ectopic gestation. Yet her attending physician could not believe so, chiefly because she had never been pregnant before. An operation was advised, but the patient declined to have it done. She gradually grew worse and finally died of peritonitis two and one-half weeks after I saw her. No post-mortem was allowed and hence there may be some doubt of the correctness of the diagnosis, yet, judging from the history of the case, the symptoms and physical signs, it does not seem that there was any room for doubt. But admitting that there was a doubt, there was no reason why an attempt should not have been made to save the patient's life by an exploratory incision before it was too late. The patient and her friends wished an operation less than two days before she died, but I declined to perform it.

Another case, somewhat similar to this one, occurred in the practice of Dr. Tobie, of this city:

Mrs. K., 36 years old, the mother of six children, the youngest nearly three years old. Had always been in good health and menstruated quite regularly, except when pregnant or nursing her children. She had been regular for twenty months previous to her last period, which was two weeks past due. She did her usual housework, and the day before she was taken ill she did a large washing. At three o'clock the next morning she was awakened from sleep by a very sharp, cutting pain in the left iliac region. The pain was very severe, and in attempting to sit up in bed she was faint and fell back upon her pillow. Her husband gave her some whisky and applied hot cloths. After an hour or so she felt somewhat better, but was unable to raise her head without feeling faint. The family physician, Dr. Tobie, was not called until late the next day. He gave her some medicine and ordered her to keep quiet. The following day he called and found her much as at the first visit, only free from pain and hence more comfortable. At this visit he learned that she had gone two weeks past her period, that a few hours after the severe pain, she began to have a slight, mucous,

bloody discharge, which she thought was the beginning of her period, as she "had gone past her time a few days, as she often did."

Upon examination nothing abnormal could be detected in the pelvic region, except it was extremely tender, especially on the left side, but no mass or enlargement could be outlined. The doctor had in mind a ruptured tubal pregnancy, yet the symptoms were not conclusive, and as the patient was not any worse he decided to wait. In a few days he became convinced that there was some serious pelvic trouble, most probably an ectopic pregnancy with rupture of the tube. I was called in consultation and found the patient in bed, unable to sit up on account of being faint and dizzy, very pale, quick rapid pulse, temperature about 103° and abdomen considerably distended and very tender, so much so that a thorough examination was impossible. From the history of the case and the symptoms I felt confident that Dr. Tobie was correct in his diagnosis of a ruptured ectopic pregnancy, and advised that the patient be removed to the hospital for operation.

This was delayed a few days owing to the objections of friends. They, however, became satisfied that the patient could not recover without an operation, and she was removed to the Buffalo Hospital of the Sisters of Charity two weeks after the rupture occurred. After as thorough a preparation as her condition would allow, she was operated upon the second day after admission. Upon opening the abdomen a considerable mass of clotted blood was found in the left iliac region, which was beginning to break down and suppurate. This was removed and the left tube ligated and removed. The intestines were very much distended and one mass of adhesions. These were separated and broken up, as far as could be, and the abdominal cavity thoroughly washed out with hot sterilised water, a glass drainage-tube introduced and the wound closed. The patient was returned to bed in as good condition as could be expected, yet we had but little hope of her recovery. Just before the operation her temperature was 103° and pulse 120, weak and feeble.

Her condition continued about as it was before the operation until her bowels were thoroughly moved by calomel and salines the second day after the operation. This relieved the abdominal distention and the temperature fell a little—one degree. For the first day considerable bloody serum escaped through the drainage-tube, but this grew less and on the second day the tube was

removed. From this time on, the patient continued about the same for a week, then began to improve. Convalescence was slow but uninterrupted, and four weeks after the operation she left the hospital perfectly well, although not strong. Since then she has continued to gain flesh and to improve in strength, and has been as well as ever. The symptoms in the latter case were not as distinct of ectopic pregnancy with rupture as in the former one, yet an examination of the removed tube showed a rupture at the middle third, and a microscopical examination of the *débris* revealed the chorionic villi.

The condition of the patient was such that the outcome of an operation was problematical, to say the least, yet the final result fully justified the attempt made to save her life.

When any woman who has menstruated regularly and who has passed her period from four to twelve weeks, is suddenly seized with pain in either iliac region; becomes faint; she may lose consciousness, but usually does not; is dizzy, nauseated, pale, generally unable to sit up, tender and sensitive over lower part of abdomen; often has a desire to go to stool and when she does is not relieved, and upon vaginal examination a boggy mass is found at one side and posterior to the uterus, and a slight, bloody, shreddy mucous discharge occurs, she has the classical symptoms of a ruptured tubal pregnancy and an exploratory incision should be made as soon as the patient can be prepared. Even if some of these symptoms should not be detected, as in the last case mentioned—no mass could be discovered on vaginal examination—an exploration should be made.

No physician is justified in allowing his patient to pass beyond assistance by waiting, or by the use of measures, the only effect of which is to lead the friends to think that something is being done.

405 FRANKLIN STREET.

TWO CASES OF ECTOPIC GESTATION—RETENTION OF THE FETUS FOR EIGHT AND THIRTEEN YEARS RESPECTIVELY—OPERATION—CURE.

BY MATTHEW D. MANN, A. M., M. D., Buffalo, N. Y.,
Professor of gynecology, Medical Department, University of Buffalo.

IT IS generally supposed that when an ectopic pregnancy has reached full term and the child has died, the danger is, to a great extent, over; and, after a longer period, it is usually taken for granted that all danger is past. That this is a very great mis-

take, a study of the two cases which are here related will conclusively prove. Both cases go to show that, no matter how long a period may have elapsed after the death of the child, the woman is still in danger.

CASE I.—Mrs. C. B., age 33, and married twice; to her second husband eight years before coming under my care.

Soon after her first marriage she became pregnant. Everything seemed to be natural until the eighth month, when she was taken with all the symptoms of labor, but the child did not seem to advance. A physician tried to apply the forceps, but failed. The labor pains soon ceased, and the true condition having been recognised the patient refused all further interference.

She was afterward seen by Drs. Bartlett, J. P. White and Wyckoff, who all concurred in the diagnosis of extra-uterine pregnancy. The patient soon regained her ordinary health, the tumor diminished in size and gave her no further inconvenience. She was married five years afterward to her second husband, by whom she has had three children.

I was called to see her first in 1888, when I found her suffering from very considerable pain in the region of the gall-bladder. I made a diagnosis of probable gall-stones. At that time I also examined the abdomen and found what I supposed was a lithopedion. I remarked then that if it ever caused her any trouble she would do better to have it removed. She laughed and said that it had been there so long she did not think it would harm her any now.

On October 18, 1891, I was called to see her again in consultation with Dr. Bartlett. I found the patient suffering very much and very eager for relief. She stated that two months before she had noticed berry-seeds in the urine, and since that time had passed large quantities of what she called pus through the urethra. An inspection of the matter passed showed it to be the contents of the upper intestine. Nutrition had become considerably impaired from loss of food in this way. At times she felt very sharp pains in the back and the bladder was in a constant state of irritation. She stated she was willing to undergo anything and was clamorous for immediate relief.

I made the diagnosis of either an intestinal opening into the sac which contained the fetus and a second opening into the bladder, or else that an abscess had formed in one of the tubes which in turn had communicated with the intestine and bladder. The former seemed the more probable condition.

On October 22d, the patient having been removed to the General Hospital, I opened the abdomen. Before the operation one could feel a large hard mass in the lower portion of the abdomen, reaching nearly to the umbilicus. It was irregular in outline, with little projections

here and there, feeling not unlike knees and elbows. The mass seemed very hard, as though it might have undergone calcareous degeneration. The intestines lay over the tumor, as could be made out by percussion. After the patient was anesthetised, it was found that the tumor was slightly movable.

On opening the abdomen with a long incision I came upon a sac with the omentum spread out over it and firmly attached. Getting my hand down to the side of the tumor, I managed to pass it between the upper part of the tumor and the omentum. Gathering this into a mass it was ligated in two places and cut between the ligatures. After the omentum was out of the way I found the tumor non-adherent, except that the intestines were attached to it in several places. The sac had now become quite movable and I could raise it from the pelvis.

Before going further I decided to open the sac and remove its contents. I did so, and came upon the foulest smelling mess I ever encountered. The first thing I touched was one of the bones of the fetal skull; after pulling this away the other cranial bones came into view, one by one. Then I came upon what was left of the fetus, a mass of decomposing flesh, bathed in pus, intestinal contents and urine. Some of the soft parts of the fetus had been preserved, and in places there were deposits of lime salts, but not to any great extent—certainly not to the extent of making the fetus a lithopedion. The heart, surrounded by the pericardium, the lungs, diaphragm. liver, portions of the intestine and bladder were all distinctly recognisable, although the extremities were completely decomposed, only the bones being left. After removing the greater part of the fetus I found long diverticula in the sac, some corresponding to the long bones in the arm and others to those of the leg.

After removing the sac from the pelvis and cleaning it out, I packed it with dry absorbent cotton to prevent the escape of any of its contents into the abdominal cavity. From the very first, wet towels and sponges had been packed around it, so that the abdominal cavity remained perfectly clean.

The next step was to separate the intestines. Five or six loops were adherent, and in two of them—one of the small and the other of the large intestine—I found openings connecting with the sac, through which I could readily pass two or three fingers. The portions around these openings were carefully disinfected with the peroxide of hydrogen, and packed in towels and placed on one side. After all the intestines had been separated, the sac was cut away, after carefully securing the pedicle. A portion of the sac was adherent to the bladder, and at this point there was an opening into this viscus which would easily admit of my finger. Evidently fecal matter had passed from the intestine into the sac, and then out through the bladder.

On carefully examining the intestines, I found the openings were

both so large that to sew them up would cause great danger of stricture. Dr. Roswell Park suggested that the openings be sewed together so as to form an intestinal anastomosis. To this I objected, as it seemed to me that there would be great danger of starving the patient to death if the small intestine, at so high a point, was made to empty into the lower portion of the large intestine. I, therefore, decided at once to resect both intestines. In order to save time I asked Dr. Park, who was present as a spectator, to undertake one of the resections. This he kindly did, taking the large intestine, which was upon the side opposite to me. In this way at least twenty minutes of time was saved, which time, if the operation had been extended, might have cost the patient her life. The intestines were united with silk by the Lembert suture, slightly modified. Instead of an interrupted suture, four or five uninterrupted stitches were taken and then the ends tied; then, again, four or five more uninterrupted sutures, and so on around. The portion of mesentery opposite to the resected intestine was tied with catgut. After the intestines had been properly united by two rows of sutures, the hole in the bladder was sewed up with an uninterrupted peritoneal suture. As the abdomen seemed to be perfectly clean it was not washed out, nor was a drainage-tube introduced.

The patient suffered a good deal from shock, but soon rallied, and did perfectly well until the eighth day. She then complained of pain in the neighborhood of the liver; in the evening she had a chill; temperature, 104°; pulse, 135. Next morning I found her, still with rapid pulse and high temperature, complaining of great pain and tenderness in the neighborhood of the gall-bladder. A distinct tumor could be recognised at this point. I administered frequent small doses of calomel and applied poultices over the swelling. This soon subsided, pulse and temperature came down, and the patient made an otherwise uninterrupted recovery.

For the first two days she had absolutely no food, only a very little water and hot tea. The catheter was passed at first at frequent intervals. There was no blood in the urine at any time. On the fourth day the nausea and vomiting ceased, having been persistent up to this time. She then began to take small quantities of hot tea, wine and chicken broth. On the third day the bowels moved slightly after an enema. On the fourth day they moved five times without any cathartic. The patient left the hospital on the twenty-eighth day, apparently perfectly well.

A more detailed description of the tumor in this case may be of interest. The sac was on the left of the uterus. On the left side of the sac I found a normal Fallopian tube and ovary. On

the right side of the uterus there was also a tube and ovary. The walls of the sac seemed to resemble very much those of a distended uterus; and what might be called the pedicle of the tumor was attached to the uterus in the neighborhood of the isthmus and seemed to merge directly into it. From these facts it seemed to me quite evident that this was not strictly an extra-uterine pregnancy, but rather a pregnancy in one horn of a double uterus.

The method of treating the pedicle should also be more carefully described. I first secured it with an elastic ligature, and on removing this I found there was little or no hemorrhage. I, therefore, made a wedge-shaped excision, brought the edges together and turned them in, and closed the whole with the cobbler's stitch suture, sewing the pedicle through and through with catgut. There was no oozing or leakage from it at all and the result seemed to justify the method.

This case certainly presents many features of interest. I have, in a previous paper, alluded to the case as one of lithopedion, and have used it as an argument to show the innocuousness of a retained fetus. I shall have to take this all back. The intestinal complication rendered the case very much more difficult to manage than it would have been otherwise. Had it not been for this, and the adhesion to the bladder, the sac could have been removed as easily as any simple ovarian cyst. A few months later two calculi formed in the bladder. They were removed by my associate, Dr. Crockett.

CASE II.—In January, 1892. Dr. W. W. Smith, of Avoca, N. Y., brought to me Mrs. S., *æt.* 39, and gave the following history of her case:

He stated that she had been married for twenty years, and that two years after her marriage she bore a living child. At that time she was very ill for three or four weeks with some septic trouble, and after it many adhesions remained in the pelvis around the uterus. She gradually regained her health, and twelve years later, eight years before coming to me, became pregnant again. At the end of the first month of pregnancy she had severe pain in the abdomen, followed by some shock. During the first three months of her pregnancy she had six or eight of these attacks. Each time there would be a slight flow from the uterus. At the end of the ninth month labor set in, but there was no dilatation of the uterus. There was tumultuous action of the child, and great suffering on the part of the woman; but, finally, all the symptoms subsided, menstruation returned, and she regained her usual health.

Three weeks before coming to me, after a sudden exertion, she was taken with violent pain in the abdomen with slight shock, and the abdomen became very tender. Dr. M. A. Crockett saw her that evening. He found her general condition good, the tenderness over the abdomen much diminished, and no change in the form or position of the tumor. Following this, there were several attacks of pain with tenderness of the abdomen, but not so severe as at the time of the first attack.

When brought to me she had not menstruated for ten weeks and believed herself pregnant. At that time I found her rather pale, with an anxious expression and a strong pulse. Thinking that she might have become pregnant the second time, I etherized her, dilated the cervix, and thoroughly explored the uterine cavity. Nothing could be removed by the curette or by the forceps, and no abortion followed. At the time she was under ether a careful examination of the abdomen was made, and I found an enlargement, most marked on the right side, quite high. The tumor seemed to be firm, resisting and quite irregular in outline, about the size of a uterus at the sixth month. There was an area of flatness over the tumor and no evidences of fluctuation. The uterus seemed to be high and pushed very much over to the left side. Diagnosis of extra-uterine pregnancy with retained fetus was made; but what was the cause of the recent symptoms we were unable to decide.

It was determined to make an exploratory celiotomy, which was done on January 27, 1892, assisted by Dr. Crockett, and in the presence of several gentlemen. An incision about six inches long was made, in order to have plenty of room to work. Adhesions were found to be very numerous. The omentum and intestines were united to the sac, and several inches of the small intestine had to be carefully dissected away. There was not a great deal of hemorrhage, but considerable oozing from the separated adhesions. After the omentum and intestines had been separated, the sac was opened by a median incision and a full-term fetus extracted. There was no odor, and the child showed no signs of decomposition. The placenta occupied the bottom of the sac, extending up along the lower wall to the site of the incision. It was firmly adherent, but not very vascular. It was left *in situ*, as it was found almost impossible to separate it. The fetus was a female, somewhat shrunken and mummified. At several points there were areas of denuded skin, looking as though the parts had been adherent to the sac and separated at the time of its removal.

The patient made a slow recovery; the wound suppurated and was packed and dressed for a long time. The placenta finally came away piecemeal, and it was not until the seventh week that the evening temperature remained below 100°. The patient left the

hospital with a sinus, but this gradually closed, and she ultimately entirely recovered her health.

What was the cause of the outbreak a short time before coming to the hospital was never determined, as the result of the operation showed nothing to account for it. This, like the case already related, shows that a fetus within the abdomen of the mother, although it may remain quiet for years and cause no trouble, will almost certainly in the end do harm. This patient did not retain the fetus as long as the preceding one; but, had it not been removed, it is altogether likely that suppuration and decomposition would have eventually occurred.

The certain lesson which these cases teach is that a fetus outside of the uterus or within an undeveloped horn of a double uterus is a constant menace and source of danger to the mother, and, no matter how well she may seem at the time, nor how little indication there may be for operation, nor how long it may have been retained, it is wiser to advise the immediate removal of such a fetus whenever it may be discovered.

This, of course, does not involve the question of operation before the death of the child. That is entirely outside of the points suggested by these cases. But, after the child is once dead, there can be no use in waiting for any great length of time. A few weeks to allow of the stoppage of the circulation in the placenta has been advised. Waiting for this to occur caused me to lose one case which, had I operated on a few days sooner, I doubtless could have saved. This case has already been published. A dead fetus within the abdomen of the mother, although it may be producing no symptoms, may be very aptly likened to a charge of dynamite: it takes only very little to make it go off, and then the damage done is apt to be serious.

37 ALLEN STREET.

BACKACHE FROM WEAK HEART.

BY CHARLES G. STOCKTON, M. D.,

Professor of the principles and practice of medicine and clinical medicine, Medical Department, University of Buffalo; Physician to the Buffalo General Hospital.

AN INTERESTING condition that seems, for the most part, to have escaped notice is represented by a long series of cases that have appeared in the wards of the Buffalo General Hospital, besides a collection that has occurred in the practice of the writer.

The clinical picture consists of an extremely feeble heart, apparently beginning without dilatation, or the usual gross lesions that are regarded as ordinary causes of cardiac enfeeblement, associated with venous distention, poor capillary circulation, cyanosed extremities, occasionally slight edema of the ankles, headache, insomnia, disturbed digestion, constipation, scant, dense and hyperlithuric urine, usually very acid in reaction, and last,—the symptom that usually attracts most attention,—pain in the back. This pain appears in the lumbar region. It is not like lumbago, but resembles more the aching sometimes observed in those who have very acid urine accompanied by uric acid sand.

In the condition in question the pain is believed not to depend upon the state of the urine alone, since it has been known to continue when the urine had been made neutral in reaction by the use of alkalies. It probably in part results from the condition of the urine, and in part from the slowing of the blood current through the kidneys and the unusual venous pressure. The latter factor is believed to be the more important, since by correcting the circulation the pain may be relieved promptly, yet such relief is not obtained by other methods of treatment.

The condition of the heart deserves further consideration. While in the beginning the heart is not found appreciably enlarged, it dilates progressively if the patient pursues his active life and does not receive adequate treatment. This may be determined by the increase of precordial dulness and by the appearance of valvular insufficiency. When this stage of the affection is reached the patient usually suffers from headache, dizziness and sometimes faintness. The heart can be made to assume its normal size and valvular insufficiencies disappear under appropriate management.

In my experience the majority of these cases occurs in men engaged in laborious work out of doors. So frequently have the lumbermen and woodsmen of North Pennsylvania appeared in the wards of the hospital suffering from this cardiac enfeeblement that, in that institution, it has come to be known as the "Pennsylvania heart." Apparently the condition has supervened upon some transient cardiac depression in those who, unacquainted with the symptoms and not appreciating the defect in circulation, continue with their usual habits.

I have no recollection of seeing these cases previous to 1889, and it has occurred to me that this may be explained by the severe epidemic of influenza that prevailed throughout this part of the

country in that year. Exceptionally, a patient appears who denies having had influenza, but the vast majority describe a sharp attack and admit not having felt quite the same since.

While suggesting that the state above may arise from influenza, it is not intended to convey the idea that influenza alone is responsible for it. Not infrequently the same condition is seen to follow typhoid fever. Fortunately, the treatment is successful when it can be properly carried out. First and foremost, it means complete rest in bed, to which should be added vigorous massage treatment daily and general faradization. The use of the alternating hot and cold spray or douche is of service and, as for medicine, nothing has proved so serviceable as the administration of large doses of nux vomica. The tincture is preferred, and the dose should be increased drop by drop until its physiological effects are observed, and these may not be seen until the patient takes from 50 to 100 drops three times a day. Digitalis is at times necessary and it may be advisable to combine this drug with nitro-glycerine or belladonna, or both these.

Months sometimes elapse before the patient is able to resume the upright position for any length of time. The backache, however, disappears immediately. The condition is liable to relapse, and I am sure that many people have become disabled by the want of a proper understanding of the disease, or by the discontinuance of the treatment before the cure is cemented.

Finally, while a weak and dilated heart and a resulting depressed circulation is sometimes seen without backache, attention is particularly called to this symptom in connection with such conditions. When a laboring man complains of backache and feebleness, one is not likely to go wrong if he turns his attention immediately to the circulation for the explanation of his case.

436 FRANKLIN STREET.

PAROXYSMAL SNEEZING.

BY W. SCOTT RENNER, M. D., C. M., Buffalo, N. Y.,
Professor of laryngology, Medical Department, Niagara University; Laryngologist to the Sisters of Charity Hospital, etc.

THIS title has been chosen in order to direct attention to a very common condition, without presupposing any theory for the causation or pathology of an association of symptoms, of which the chief and most distressing are paroxysms of sneezing, that in many cases occur daily and in some cases several times a day throughout the year.

Paroxysms of sneezing, associated with profuse watery discharge from the nose and eyes, swelling of the nasal mucous membrane and nasal obstruction, which may be transient, are described as reflex in character. Certain physiological reflex actions commonly occur as the result of the irritation of the healthy mucous membrane of the nose; these are sneezing, lachrymation and coughing. For example, mechanical irritation of the anterior portion of the septum and turbinated bones in a case where the reflexes are of normal intensity may produce sneezing, lachrymation and rhinorrhea. If we pass the probe back along the septum or turbinated bones, or if we touch the pharynx near the Eustachian tubes with the probe, the nature of the reflex is changed and the patient coughs instead of sneezing.

These symptoms, sneezing, rhinorrhea, and the like, are found in several so-called diseases of the nasal mucous membrane. When occurring at certain seasons of the year, as early summer and early autumn, this group of symptoms are familiarly known as rose cold and hay-fever, and the pollen from the rose and certain grasses are supposed to be the exciting causes of the condition. There is another class of these cases, in which the attacks of sneezing do not limit themselves to any season of the year. In these the condition persists throughout the year, the attacks of sneezing coming on, perhaps, every day. These cases are named sneezing catarrh, false hay-fever, or other similar names. Cases of this last class are of such frequent occurrence that I wish to make a few general remarks concerning their symptoms, the local conditions in the nose associated with them, their relation to hay-fever and asthma, and the treatment which I have found most beneficial.

These patients present themselves with an account of their condition much as follows: They state that they have suffered from attacks of sneezing for years, occurring at intervals all the year round, are worse during the winter, or, perhaps, in the summer; on getting out of bed in the morning, or at any time during the night, the patient is immediately attacked by a violent paroxysm of sneezing, which may last for two or three hours. Dust, smoke or the atmosphere of a close room, a warm theater or concert hall, is certain to bring on an attack which compels the patient to leave the room or be very much embarrassed by a fit of sneezing. Fatigue or worry may, in these cases, bring on an attack, and the discharge from the nose and eyes is profuse and like water. These attacks are accompanied by tickling of the whole of the anterior of the

nose, sometimes reaching into the fauces. During the attack, the patient complains of oppression of the chest; there may be a history of asthma in the family; a strong mental impression will often arrest an attack. After this condition has persisted for years, the patient may be awakened in the night with an asthmatic paroxysm, accompanied by coughing, which will probably occur night after night at the same hour. After this state of affairs has lasted for some time, the patient becomes irritable and nervous, complains of frontal headache and has a wornout, haggard look, produced by the constant mouth-breathing and want of sleep.

A rhinoscopic examination of several of these cases will not reveal a similar condition in each. In some there is but little apparent change of the mucous membrane; in others there may be excessive hypertrophy of the tissue over the lower turbinated bones, or of that over both the lower and middle turbinated bones, or there may be nasal polypi. There will, probably, be more or less deviations of and outgrowths from the nasal septum. The mucous membrane over the turbinated bones and the nasal septum in many, as well as in cases of true hay-fever, has a peculiar ashen gray color, is wet with the exuding serum, and has a soggy appearance, as if soaked in water. In others the mucous membrane is of a dark red color, but is bathed in the same watery secretions as the first class. Mulhall, of St. Louis, has compared these two conditions to the vaso-motor disturbance seen in rage, one man's face being white while another's is livid. On examining the nasal mucous membrane with a probe, sensitive spots are found on the septum and turbinated bones, the touching of which produce violent attacks of sneezing. These spots are identical in character with those described by Sajous and J. N. Mackenzie as occurring in hay-fever. This, we can easily understand, is simply an exaggeration of the normal nasal reflex of the anterior part of the nose described above. The cough reflex is often likewise exaggerated when we have paroxysms of coughing at night accompanied by asthmatic breathing.

A person who has not passed through an experience of this kind cannot appreciate how mortifying it is to be compelled to sneeze perhaps every morning for years, to feel that an attack may come on at any moment and always at times when it will most embarrass and mortify the sufferer; for example, in the theater, during a call or at the dinner table. Some patients are often compelled to use a handkerchief constantly for hours daily,

especially in the morning, to receive the flow of serum and mucus. The hay-fever patient is fortunate compared with the individual suffering from the more chronic disease, for his trouble lasts but a few weeks, while hay-fever resorts are abundant and easily reached; but the poor sneezer must go on suffering the year round, unless treatment affords him relief. I have met with sneezing catarrh more frequently than hay-fever, my attention being first directed to this disorder because I suffered from it myself. I shall not attempt, at present, to report any of the cases of this condition which have come under my notice, but will call attention to certain points in them which illustrate their relation to hay-fever and asthma.

Although there are many of these cases in which the patients are not affected by the pollen of the plants which excite hay-fever and rose cold, nevertheless there are others that are much worse during the hay-fever season ; while, on the other hand, many patients who have suffered from hay-fever for years, begin after a time to suffer from a similar condition all the year round identical in character with the condition which I have described.

Likewise, many cases of bronchial asthma are accompanied by paroxysmal sneezing, and many of those suffering from paroxysmal sneezing, after years, develop bronchial asthma, like their brethren with hay-fever. Ringer recognised, years ago, the intimate relation of these three,—paroxysmal sneezing, hay-fever and asthma. He gives an exhaustive description of these conditions in earlier editions of his work on therapeutics, and illustrates their intimate relation to each other by the citation of cases.

It is evident from the clinical history of cases of hay-fever, rose cold and sneezing catarrh that they are identical in character, only differing in the exciting cause which brings on an attack and in their duration. Hay-fever and rose cold are excited by the pollen of certain flowers and plants and, consequently, only occur when the pollen of these flowers and plants are found in the atmosphere. In the other cases the attacks are brought on by a variety of causes, such as contact of the feet with a cold floor in the morning, the atmosphere of a warm room, and the like; and as such causes are always present when the local conditions of the mucous membrane are susceptible to irritation, they are likely to continue throughout the year unless successfully treated.

I do not wish, in this paper, to describe the pathology of these conditions, but if we accept the theory that asthma and hay-

fever are due to a vaso-motor disturbance, and call hay-fever rhinitis vaso-motorea periodica, we must give to this condition the name rhinitis vaso-motorea chronica, and so on. Whatever theory is offered, the one must be accepted if the other is.

The same distinction is found here as between hay-asthma and bronchial asthma due to other causes. I should, however, prefer the name coryza vaso-motorea to rhinitis vaso-motorea, because there is really, in these cases, no inflammation, which is essentially a part of the disease and, if present, is only accidental. The cases which have just been described must not be confounded with that condition which has been called nasal rhinorrhea, in which there is a constant and profuse running of serum from the nose, perhaps for hours daily. Several of these cases, by different authors, have been cited by Bosworth in his book. I have met this condition but twice in my experience. I am inclined to believe that the constitutional symptoms are due to the local trouble, *i. e.*, mouth-breathing and want of sleep from nasal obstruction, but not so much to a neurotic habit or gouty or lithemic diathesis, although I believe that diet and exercise will do much to hasten a cure. The neurotic habit and psychical condition has probably much more to do with the production of true hay-fever than with causing paroxysmal sneezing, although the mucous membrane itself is more susceptible to external influences in these cases.

TREATMENT.

The special diseased conditions of the nasal mucous membrane which predispose to paroxysms of sneezing, as has already been stated, are the same as those which predispose to hay-fever and rose cold, the chief of which are hypertrophic rhinitis, deflections and outgrowths of the nasal septum and nasal polypi, or any other obstructive conditions of the nose, which tend to produce chronic turgescence of the blood-vessels of the mucous membrane. Therefore, special indications for treatment are found by a careful investigation and diagnosis of each case. Whatever lesion is found should be treated in the same manner in which it would be treated were there no such trouble present as the paroxysmal sneezing. Hypertrophies, deflections of the septum and nasal polypi should be removed by the most approved surgical methods. In most of these cases there is, in addition to the gross lesions or, perhaps, without the gross lesions, the hypersensitive spots on the mucous membrane described above. These, of course, require additional treat-

ment before the unpleasant symptoms, for which the patient has consulted you, disappear. I treat these, when on the turbinated bones and on the septum,—and they occur most frequently on the septum,—by touching them with pure carbolic acid, or with a solution of chromic acid in water of a 4 per cent. to 10 per cent. strength. This should, of course, be repeated until all the sensitive spots are made out and cauterized. This method of touching the spots I should prefer to the use of the galvano-cautery, for I do not think that it is possible to use the cautery to any extent without producing a cicatrix. It seems to me all that is needful is counter-irritation, which is produced by the use of the acids of which I speak. This treatment, of course, should be supplemented, in most cases, by constitutional measures. I generally administer drop doses of Fowler's solution after meals, for small doses of arsenic seem to act well in controling the sneezing; at the same time I advise light exercise in the open air and sunlight. The patient should avoid stimulating diet and the use of tobacco, especially cigarettes.

As soon as all pathological conditions of the nasal mucous membrane have been removed, and all sensitive areas producing either sneezing or coughing have been carefully and thoroughly cauterized, the reflex manifestations disappear, perhaps only for a time, yet often permanently. Should they return, it will only be in a modified and mild form, when the spots which have been overlooked at the first treatment should be sought out and cauterized. Perseverance in this sort of treatment will practically cure most cases and relieve all. This is the same treatment which I follow locally in the treatment of hay-fever. I have been led to conclude, from cases that I have seen, that hay-fever, rose cold and sneezing catarrh are identical, the only difference being in the exciting cause of the paroxysm. The reasons which have led me to reach this conclusion are that the character of the attacks are the same, the appearance of the mucous membrane and the associated pathological conditions identical, while the same forms of treatment are the most beneficial in the majority of cases.

We must not, however, forget that in all cases of chronic nasal catarrh the nose is susceptible to the slightest irritation. These patients are said to be always taking cold; this cold taking varies in frequency with the amount of pathological change in the nasal mucous membrane. These attacks of cold in the head are often a passing paroxysm of sneezing; it seems to me that the difference

between these cases and those of the classes of which I have spoken is more one of degree than of character. In many cases, whether of hay-fever, rose cold or sneezing catarrh, psychical influence seems to have considerable to do with precipitating an attack. An attack of hay-fever, for instance, which should have come on according to the patient's reckoning on August 20th, at 4 P. M., can be delayed a couple of hours by turning back the clock that much. J. N. Mackenzie produced an attack of rose cold in a susceptible lady by suddenly producing an artificial rose in front of her. Dread of an attack of sneezing has often brought such an attack about in cases of sneezing catarrh.

361 PEARL STREET.

REPORT OF A CASE OF LARGE OVARIAN TUMOR—OPERATION AND RECOVERY.

BY HERMAN E. HAYD, M. D., M. R. C. S., Eng., Buffalo, N. Y.,
Attending Gynecologist to Erie County Hospital.

VERY large ovarian tumors are comparatively rare, owing to the wonderful advance of modern surgery. Clearer methods of diagnosis, better equipment of the general practitioner and a more thorough appreciation of the pathology of pelvic disease has led to the performance of early operations for abdominal and pelvic troubles.

In China and oriental countries where medicine and surgery is still practised by the favored few, who become great and learned by reason of the ignorance and superstition of their people instead of by the possession of scientific knowledge, very large tumors and all kinds of monstrous pathological conditions are every day met with. Perhaps one of the most interesting cases of advanced ovarian disease occurred in China, and is reported in the April (1895) number of the *American Journal of Obstetrics*, where the woman weighed previous to the operation 246 pounds, and three weeks after operation seventy-seven pounds. She presented herself at the hospital door pushing a wheelbarrow in which she carried her own tumor.

Other cases are reported in our own country where the growth had reached enormous proportions, but perhaps none so large as this one alluded to.

The tumor in my case weighed between eighty and ninety pounds; its fluid contents, thirty-four quarts, equal to sixty-eight pounds, and

the sac and solid portions of the tumor eighteen pounds. The history of the case is, briefly, as follows:

Mrs. R., aged 55; married; no children. First unwell when twenty; no pain and regular. Five years ago she noticed a swelling in the right iliac region which was painless, and it progressively increased in size until she sought relief two years ago. A diagnosis of ovarian tumor was made and it was tapped and a large pailful of a limpid fluid was removed. It was tapped again in five months and about the same period for a dozen times or more, when it became necessary to tap it every two months; but laterally it was done every three weeks and the amount of fluid which was removed each time more than filled two very large patten pails. In all she was tapped twenty-four times, and once I tapped her a few days before the operation so as to lessen the shock consequent upon the sudden removal of very large tumors. The fluid was of a greenish muddy color, thick and glutinous and run with difficulty through a good-sized trocar; in fact, so slowly that after having taken away about fourteen quarts the instrument was withdrawn.

While exercising antiseptic precautions in the way of washing the skin and the like, the patient began to laugh and said, "That is not necessary. Push in the instrument, leave me a piece of sticking plaster and go away and I will pull it out when the tumor is empty."

Upon the right side, well up under the borders of the ribs, a large, hard mass could be made out, which, upon opening the belly, proved to be the solid part of the tumor. The belly was enormously distended and the skin and thinned abdominal parietes seemed to be quite adherent to the fluctuating mass, especially anteriorly, where numerous puncture marks were visible. Pain and tenderness were present in different areas. The woman's physical condition was fair, although she looked very much older than her years. The legs were somewhat swollen, but this swelling disappeared after remaining in bed a few days. Heart and lungs were normal and the kidneys showed no evidence of disease. For some days previous to operation hypodermic injections of strychnia, one-sixtieth grain, were given every fourth hour and the patient was put to bed and nourished freely with light but nutritious food.

On the morning of March 15, 1895, the operation was performed. A long incision was made and the cyst wall cut into and its contents let out. The adhesions anteriorly were so dense that it was a very difficult matter to decide which was abdominal wall and which was cyst. After considerable manipulation the peritoneal cavity was found and the adhesions, although free, were easily separated and the tumor delivered. Its pedicle was broad and it was tied off in sections with silk. The left ovary, which was the size of a very large orange and cystic, was also removed. The

incision was then extended above to near the ensiform cartilage and below to the pubes, warm flat sponges were placed over the bowels; then about four inches of the redundant abdominal walls on each side of the incision were cut off and the wound brought together with silkworm-gut, after having first flushed the peritoneal cavity and placed a drainage-tube in position. There was some shock, but with the assistance of hypodermic injections of whisky and strychnia, together with the inhalation of oxygen gas, reaction came quickly. No vomiting or nausea of any moment followed the operation, and the tube, which discharged freely for the first twelve hours, was removed on the following morning. The temperature never rose above 99° and the whole course of the case was uninterrupted. The bowels moved on the third day after an injection of soap and water. The stitches were removed on the tenth day, on the twenty-third day the patient was permitted to sit up with a good fitting abdominal support and on the twenty-eighth left the hospital for her home in North Tonawanda.

The tumor was a large oöphoritic cyst, which contained a number of smaller cysts, and upon examination these smaller cysts simply contained a viscid glutinous fluid.

78 NIAGARA STREET.

NUCLEAR OPHTHALMOPLEGIA.

BY ALVIN A. HUBBELL, M. D., Buffalo, N. Y.,

Professor of diseases of the eye and ear in the Medical Department of Niagara University; Surgeon to the Charity Eye, Ear and Throat Hospital; Oculist and Aurist to the Sisters of Charity Hospital, etc.

MR. H. W. offers a striking and typical picture of chronic, progressive or nuclear ophthalmoplegia. He is a farmer, now 40 years of age, in good health and with no history of syphilis or any severe illness. When he was twelve years old he had excessive hemorrhage from the nose. Soon afterward it was noticed that he could not turn his eyes as far as usual. This impairment of motion increased and for many years, he cannot tell how many, he has not been able to turn either eye in any direction. He consulted me first during the summer of 1892. He then presented the physiognomy shown in the accompanying engraving, which is from a photograph taken in 1893.[1] His eyeballs are directed horizontally forward and the visual axes are parallel. He is unable to turn his eyes to the slightest extent in any direction, from side to side, up or down, although he can converge the eyes slightly on looking at a

1. See Fig., p. 41.

nearby object. He cannot open his eyes except by the forcible action of the occipito-frontalis muscle and then only to lift the upper lids to the center of the cornea. He winks very infrequently, the winking reflex being very much impaired. The muscles of both sides of the face supplied by the facial nerve are stiff and inactive, although not completely paralysed. When he laughs, the facial expression is most unnatural, the ordinary movements being much restricted. Another peculiarity is that perspiration takes place about the face at ordinary temperatures while there is no perspiring of any other part of the body.

The pupils are somewhat larger than normal and respond very slightly to light, and not at all to efforts at convergence and accommodation.

As regards the state of vision it is somewhat below normal, that of the right eye being, when first tested in the summer of 1892, No. 24 Snellen, at 5 meters ($\frac{5}{24}$), and the left, No. 9 Snellen, at 5 meters ($\frac{5}{9}$). Under the influence of iodide of potassium for a year it improved somewhat, rising in the right eye to $\frac{5}{18}$ partly and the left to $\frac{5}{6}$ partly. There is slight myopia in both eyes, that of the right being 1.00 D., and the left 0.50 D. His power of accommodation seems to be preserved, as he is able to read ordinary and even fine print without difficulty at fourteen inches. The visual fields are normal and he seldom sees double.

Examination with the ophthalmoscope shows both fundi to be normal in appearance, excepting, perhaps, a slight obscuration of the outlines of the optic discs.

In brief, then, this case presents the following symptoms:

1. Immobility of both eyeballs, excepting,
2. Slight convergence power for near vision.
3. Ptosis, both eyes.
4. Pupils somewhat enlarged.
5. Pupil reflex nearly lost.
6. Action of ciliary muscle (accommodation) preserved.
7. Winking reflex much weakened.
8. Paresis of both facial nerves.
9. Hyperidrosis of the face.
10. Slight optic neuritis (?).

The course of the disease has evidently been progressive, the muscles of the eyeballs being affected first and afterward those of the face, which are not yet completely paralysed. All the external muscles of the eyes are paralysed almost completely, but those within the eye retain their function quite fully, as is evidenced by the power of the ciliary muscle to accommodate and the sphincter of the iris to preserve the nearly normal size of the pupil.

The etiology is obscure and although referred to the nose-bleed

I cannot conceive what relation the latter has to it. The history of the case entirely eliminates syphilis. As the patient is free from all symptoms pointing to other diseases, it is impossible to attribute it to a pathological condition to which it might be secondary.

The diagnosis in this case clearly locates the lesion in that group of nuclei lying beneath the aqueduct of Sylvius and in the floor of the fourth ventricle of the brain, from which the motor nerves of the eye and other cranial nerves take their origin. Be-

HUBBELL—NUCLEAR OPHTHALMOPLEGIA.

ginning near the posterior extremity of the third ventricle and running backward we have, first, the nuclei of the motor-oculi, or the third nerve, then that of the trochlear, patheticus, or fourth, next that of the abducens, or sixth, and lastly the facial, or seventh nerve. The most anterior nuclei are for the fibers of the third nerve which supply the iris and ciliary muscle and the muscles of convergence. The most posterior give origin to the facial together with

those fibers supplying the orbicularis palpebrarum. In the case before us, therefore, the most anterior nuclei must have escaped, in a measure at least, the disease-process, as is shown by the nearly normal-sized pupils, the fair accommodation and the slight ability to converge for near vision. The most posterior nuclei were involved last, as the facial muscles have become affected more recently and still preserve their functions to a certain degree.

What this lesion is, which began a little behind the most anterior nuclei and has gradually extended backward, it is not easy to say. In cases where post-mortem examinations have been made, the results have been negative in some, in others they have been regarded as "polio-encephalitis superior" (Wernicke), and in others still as "nuclear degeneration" (Hutchinson), the same as in muscular atrophy. It appears to me that this case belongs to the latter class.

I administered the iodide of potassium in the treatment in this case, not with any expectation of diminishing the palsy, but with the hope of improving the vision somewhat by controlling a slight neuritis which appeared to be present in the optic nerves. I feel that my hope has been measurably realised.

We have presented to us here a case of ocular palsy of nuclear origin, so-called *nuclear* ophthalmoplegia, as distinguished from those ophthalmoplegias in which the lesion is in the course of the nerve-fibers (peripheral) and may be *basal* or *orbital* in situation, or above the nuclei in the intra-cerebral tract between the nuclei and the cortex (*fibrillar or cortico-peduncular*), or in the cortex (*cortical*). The characteristic features of nuclear ophthalmoplegia are set forth in the report of this case. The disease is progressive and affects the muscles of both eyes alike. In the peripheral forms one or few muscles may be involved and confined to one eye, and are usually easily diagnosticated by the history of the case. In the cerebral varieties there are usually accompanying symptoms pointing to cerebral lesions and the palsy may affect both eyes so as to produce conjugate deviations.

Cases of nuclear ophthalmoplegia are so infrequent and autopsies in such cases so rare that its study, etiologically and pathologically, is still very interesting. It has been found both as a primary affection and as secondary to other diseases, such as tabes, disseminated sclerosis, diphtheria, tuberculosis, diabetes, exophthalmic goitre, syphilis and poisons. It may also arise from traumatism of the head. Vascular lesions and disturbances of circulation may

induce it. Dufor (*Annales d' Oculistique*, Mars-Avril, 1890, p. 97,) has made the most extensive collection of cases of nuclear palsies with which I am acquainted. His collection numbered 220. Out of these, 37 autopsies had been made, establishing that 9 were due to tumors, 8 to hemorrhage, 1 to softening following thrombosis, 7 to acute hemorrhagic inflammation, 3 to inflammatory degeneration, acute or chronic, 6 to atrophic degeneration and the others were negative. As to sex, out of 163 in which this was determined, 122 were males and 41 females. In 125, where the age was given, 23 cases were 1–15 years old; 35, 15–30 years, and 67, 30–69 years. Out of 183 cases the general health was enfeebled, in 105 by other diseases, such as syphilis, diphtheria, diabetes, locomotor ataxia, labio-glosso-pharyngeal paralysis, disseminated sclerosis, and the like, while 78 cases appeared to be in perfect health. It is interesting to note that Dufor found evidences of syphilis in 42 cases.

The prognosis depends upon the nature of the lesion and the cause and is not always hopeless. The treatment, therefore, may avail much and should be governed according to the etiology and diagnosis.

212 FRANKLIN STREET.

A CASE OF RHINOPHYMA (ROSACEA HYPERTROPHICA).

BY ERNEST WENDE, M. D., Buffalo, N. Y.,
Clinical professor of dermatology, University of Buffalo.

THE subject of the accompanying portrait is a German, aged 63, and by occupation a dealer in pig's feet. Apart from the existence of a squamous eczema of the left leg, and his facial embellishment, he is to all appearances healthy.

He gives the following history: Twenty years ago, subsequent to an attack of typhoid, he first noticed a daily temporary flushing of the face, which phenomena continued for several months, when the hyperemia induced became permanent; and, coincident with it, there occurred appearance of numerous papules, pustules and nodules. They were well disseminated over the face and neck, the greater number, however, occurring upon the cheeks and chin.

Four years later he observed a small excrescence arising from a papule seated on the right side of the nose, near the margin, mid-

way between the tip and ala. In its incipiency, the development was very gradual, but it finally grew rapidly to proportions of considerable dimensions, which can be best appreciated by referring to the illustrations.

Recently, it has persisted unchanged with the exception that it has become somewhat paler in color. It was ascertained, by means of a pair of calipers, that the measurement of the longest diameter, from its pendulous attachment to base, is four and three-fourths inches; transversely with the face, three and one-fourth inches, and at right angles with the latter, three inches.

In addition to the neoplasm just described, there are eight similar tumors situated about the tip of the nose, the larger of which is nearly round and measures one and one-half inches in diameter. The small ones are sessile, while the larger two have pedicles and dangle at every movement of the head. To the touch, the consistency of these growths seem doughy and elastic. Their surface is pitted with numerous pores, some of which gape widely, and upon pressure a vast quantity of sebum, having a disagreeable, rancid odor, can be liberated. At one time their color, as well as that of the nose, was of a purplish hue; it has now, with advancing age, assumed almost a normal tint. Furthermore, their surface and that of the nose and cheeks, in close proximity, is shiny and oily and traversed by dilated and tortuous blood-vessels. The nasal cartilage and mucous membrane are apparently healthy.

Barring the disfigurement, the sensation of weight, the interference in seeing the movements of the mouth, and inconveniences offered in eating and drinking, there are no disagreeable features.

In taking his beer he raises the neoplasm with one hand upward upon its elastic pedicle or hinge, and with the other the glass is put to his mouth.

Concerning the individual's habits, it may be stated that he is a moderate beer drinker; also, owing to a recent seizure of gravel, he has indulged in the morning in a drink or two of gin and juniper-berry tea.

In accordance with the views of some authorities, alcohol is closely connected as the etiological factor of a red nose and its ornaments. However, I am of the opinion that there is generally required some determining cause outside of alcoholic beverages, for tipplers are common while rhinophyma is rare—and, again, it has occurred in persons of temperate, even abstemious, habits.

WENDE.—RHINOPHYMA (ROSACEA HYPERTROPHICA).

Were it not for the emphatic objections offered against any and all surgical interference by the owner, this dermatological curiosity could easily and readily be removed by excision and a presentable nose produced.

471 DELAWARE AVENUE.

TUBERCULAR INFECTION IN STREET CARS.

BY WILLIAM G. BISSELL, M. D.,
Bacteriologist, Department of Health, Buffalo, N. Y.

A SHORT time ago the Buffalo Street Railway Company adopted a rule looking to the prevention of expectoration on the floors of street cars. There was placed in each car a sign reading to the effect that "spitting on the floor of this car is positively prohibited." The result of the display of these signs was the lessening, to a small degree, the amount of expectoration on the floors of the cars.

The move was one in the right direction, and should be highly commended; but company rules of this nature are difficult to enforce without stronger legislation back of them, and some measure should be adopted to aid the company in its effort toward better street car sanitation.

During the past few years much has been stated as to the possible spreading of tubercular infection by careless and indiscriminate expectoration. Where is there a more common place for the spreading of such infection than the floors of street cars?

The sputum becomes dried, mixed with dust and easily disseminated by currents of air. During the year 1894, in the city of Buffalo, over 42,500,000 passengers were carried, in some 2,700 cars, by the street railway company, and one can appreciate by this number the very considerable amount of dried expectoration that must necessarily have been inhaled.

With a few exceptions, very little work has been done to demonstrate practically the possibility of street car sputum infection, calculations having been based on the fact that tubercle bacillus is usually present in the sputum of consumptives, and, undoubtedly, among the number that ride on the street cars annually there are several hundred persons suffering from the disease.

This point has been demonstrated to be a fact, for during the past three months fifty-six microscopical examinations have been made of selected samples from the floors of cars at the foot of

Main street, and four of these examinations revealed presence of tubercle bacilli.

I draw attention to one mount, of which I furnish a micro-photograph. This photograph shows a clump of tubercular organisms numbering in the hundreds, the sample having been collected from a Cold Spring car.

BISSELL—TUBERCULAR INFECTION IN STREET CARS.

The question now arises, How can the contaminating of cars by tubercular sputum be prevented? Principally in two ways:

First, by educating the public in general as to the danger of careless and indiscriminate expectoration, which step is being thoroughly taken at present by the department of health.

Second, by the passing of a city ordinance prohibiting the expectorating on the floors of cars, public buildings and similar places.

Until such ordinance has been passed, a rule of the street railway company, or of any private corporation, cannot be satisfactorily enforced. The point I wish to bring out in this short article is the necessity of such an ordinance, and the hope that legislation will be brought to bear on this point in the near future.

I am indebted to my colleague, Dr. Carpenter, for his assistance in the work of street car sputum contamination, and also to Dr. Herbert M. Hill for the micro-photograph above displayed.

10 Orton Place.

Ulyptol belongs in the same category with steresol. It is occasionally mentioned as a "new antiseptic." It was originally named and introduced in 1886, and is prepared by mixing six parts salicylic acid, one part carbolic acid and one part oil eucalyptus. It is also known as eulyptol, and the mixture is of service in treating wounds.—*American Therapist.*

CARDIAC EMBOLISM FOLLOWING ABDOMINAL SECTION.

By C. C. FREDERICK, B. S., M. D., Buffalo, N. Y.,
Surgeon-in-Chief to the Buffalo Woman's Hospital; Gynecologist to the Erie County Hospital.

SOMEONE has said, "the unexpected always happens." Nowhere is the truth of this assertion more fully appreciated than among medical men, for there is always something new and unexpected turning up. As an illustration of one of the possible complications which may follow any operation, I wish to report one of death from cardiac embolism, following a section done for double tubo-ovarian abscesses.

Embolism of the heart, lungs or brain, during labor, after labor or accompanying phlebitis, is not rare. I have failed to find any reported cases of embolism following operations, the exciting cause being the operation itself. I think it must be rare.

The only other case of which I know occurred in June, 1891, in the clinic of Prof. Leopold, at Dresden, during the time that I was with him. She was a young woman under twenty-five years, whom he dilated slowly with laminaria tents for dysmenorrhea. The patient was strong and well nourished. Within twenty-four hours after the removal of the laminaria tent she suddenly developed dyspnea and cyanosis, which lasted for about six hours till she died. An autopsy was made the following day. A large clot was found obstructing a large branch of the pulmonary artery at a bifurcation. Prof. Leopold expressed his surprise that an embolus could originate from so slight a cause. He also stated that this was the first time he had seen embolism following an operation.

The history of my case is as follows:

Mrs. M., *æt.* 40, American, entered the Erie County Hospital May 30, 1894. She gave a history of pelvic inflammation several years before, from which she had suffered continuously and for which she sought relief. She was emaciated, had continuous pelvic pain, and had recurring attacks of severe paroxysms of pain and fever, which would keep her in bed for several days. She had the cachectic look which usually accompanies pus collections.

Examination of the pelvic contents showed large tender masses filling the entire pelvis and holding all the organs there firmly fixed. Abdominal section for removal of the diseased structures was recommended and the patient gave her consent to the operation. Her heart, lungs and kidneys were found to be healthy, but she was given tonics and strychnia hypodermically for several days in preparation for operation.

On June 13th, at 10.30 A. M., assisted by Dr. Hayd and the house staff, I removed the tubo-ovarian abscesses of each side, both of which were covered in and bound down by firm adhesions. Although the adhesions were thick and dense, the bowel was all separated without rupture. The meso-rectum, for about two inches of its course, just below the sigmoid, was torn through, but not to so great an extent that interfered with the nutrition of the gut. The only delay in the operation was caused by two small vessels deep in the pelvis, which bled freely till the patient was put into the Trendelenburg posture, when they were easily found and ligated.

The abdomen and pelvis were washed out with a warm normal salt solution, and a glass drainage-tube placed in Douglas's pouch. Drainage was used because one of the abscess sacs had ruptured during enucleation, flooding the abdomen with pus.

The patient rallied promptly and came out of the anesthetic without shock. In twenty hours the drainage-tube was removed. At about 5 P. M., June 14th, (thirty hours after operation,) she began to have dyspnea, a rapid and irregular pulse, with cyanosis. Auscultation over the heart showed a tumultuous action with confused murmurs, a veritable churning sound. Despite hypodermic stimulation with strychnia, digitalin and glonoin, she grew rapidly worse and died at 11.40 P. M. the same day, in six hours and forty minutes after the commencement of the attack.

The following day, June 15th, an autopsy was made by Dr. Francis Metcalfe. The pelvis and its contents were found free from any evidences of peritonitis. The bowels had adhered to the surfaces from which the diseased structures had been removed, completely sealing the rents in the peritoneal surfaces made necessary by the enucleation of the diseased appendages. The liver, spleen, kidneys and other abdominal viscera were normal. The pulmonary arteries contained no clots and the lungs were not diseased. The heart and its valves were normal. In the right ventricle was found a large clot which nearly filled the cavity, and which was entangled in the valves. The center of this clot was found to consist of a solid mass of fibrine, as large as a chestnut.

Evidently this clot caused the dyspnea and death. The fibrinous center of the clot probably had its origin in some of the pelvic veins, and had been carried into the ventricle and there became entangled in the valves.

64 RICHMOND AVENUE.

SYNCHRONOUS AMPUTATIONS.

By CLAYTON M. DANIELS, M. D., Buffalo, N. Y.

THE mortality in cases of synchronous amputations has materially decreased as surgical science has progressed, until the percentage of fatal results is hardly greater now than in single amputations twenty years ago. Not that every case is suitable for operation, but I believe that more cases can be made so by proper preparatory treatment.

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As a basis for my opinions I herewith present histories and illustrations of seven consecutive cases, which embraces my experience with double and triple synchronous amputations, together with some deductions therefrom.

CASE I.—J. Kelly, aged 8½ years. Railway accident; both legs crushed; the left just above the ankle, the right three inches higher

DANIELS—SYNCHRONOUS AMPUTATION. CASE I.

up. He was a strumous, poorly nourished, weakly child. I saw him about forty minutes subsequent to the accident. He had lost considerable blood and was suffering from profound shock; the prospects for operative measures dubious. I stimulated hypodermically very freely, with brandy. Reaction set in promptly. On account of shock and the free stimulation the little patient was anesthetised quickly. Operation occupied twenty-five minutes. Patient placed in bed with hot water bottles

about him. He rallied well. The process of repair was very slow; several small pieces of bone were exfoliated from the right tibia. He remained under observation three months, until the stumps were well healed, and now with the aid of his artificial legs he walks without a limp, and is an expert on roller skates and in bicycle riding.

CASE II.—J. Griffin, aged 9½ years. Crush of right foot up to the instep, and of left arm at the upper third; also an epiphyseal fracture

DANIELS—SYNCHRONOUS AMPUTATION. CASE II.

of superior end of right humerus. Patient not suffering from shock to any appreciable extent. Circulation good; body warm; pulse accelerated; otherwise normal. Operation about one hour after injury. Ferguson's modifications of Syme's amputation of right foot. Ordinary flap amputation of left arm. Fracture of humerus reduced. Union by first intention. Recovery and discharged in three weeks.

CASE III.—Victor G. Welch, sailor; railway accident; aged 35. Crush of right leg at upper third; left leg at the middle third, and left hand and wrist; fracture of left clavicle, and general contusions. He was knocked down and run over by a car at 12.30 A. M., and not discovered until some time later. He remained in an unconscious state under the car, which had to be raised before he could be extricated from the trucks and wheels. Operation at 3 A. M. Patient had been stimulated to intoxication. Shock not severe. Amputation of right

DANIELS—SYNCHRONOUS AMPUTATION. CASE III.

leg as high as possible without entering knee joint. Left leg four and one-half inches below the knee; and forearm two and one-half inches above the wrist. Fracture of clavicle reduced and patient placed in bed. Operations completed in one hour and fifteen minutes. He rallied well. Upon visiting him four hours later he cheerfully said, "Good morning, doctor; how are you?" and in reference to his serious condition said he had no idea of dying. Union by first intention in all three amputations. He was discharged twenty-five days after injury.

CASE IV. H. P., aged 35. Trolley car accident. Both legs crushed at the junction of middle and lower third. Operation an hour and a half after injury. Amputation at nearly the same point. Free stimu-

lation during the operation. As this patient was in the tertiary stage of specific disease his prospects for recovery were in no way promising. Constitutional treatment was continued during the progress of the

DANIELS—SYNCHRONOUS AMPUTATION. CASE IV.

case. He, however, made a good recovery with the exception of some exfoliation of bone from the left tibia.

CASE V.—Stanislaus Mackowiak; railway accident; aged 23. Complete crush of right leg at knee and of left leg a little lower down. My assistant, Dr. Edward M. Dooley, was called at time of injury, on account of my absence from the city. He amputated the right thigh four inches above the knee, and the left leg at the middle third. On account of the extensive injury to the left leg, which was much worse than appeared on first examination, extensive destruction of the soft parts promptly followed, and traumatic gangrene made rapid progress. Eight days subsequent to the first amputation I re-amputated the left thigh about three and one-half inches above the knee; so that in this case the man really suffered triple amputation. He made uninterrupted progress. Union by first intention throughout. Here was a

case where a man had no desire to live. In fact, he used every effort possible to defeat his recovery, even to the extent of starvation, and for five days after the primary amputation did not taste food, declaring that he would die in spite of us. On the morning of the fifth day, after an earnest inquiry as to his prospects of living, and when I told him that he could not die if he wanted to, he said "If that is the case, please send in my breakfast."

CASE VI. Willie McMahon, aged 12 years. Trolley car accident. Patient suffering severely from shock. Left leg crushed at the knee; right at the ankle. Previous to operating I stimulated hypodermically until his body became warm and proceeded to operate. The pulse at the beginning of operation was 160. Amputation of left thigh three and one-half inches above knee-joint; right leg, at junction of lower and middle third. Free stimulation continued during the operation; equal parts of whisky and ether being used. Operations concluded in about forty minutes. Pulse at that time had dropped to 110. He made a rapid and uninterrupted recovery.

CASE VII.—Owen S., aged 28, while attempting to alight from a moving freight train on February 17, 1895, fell so that a train of thirty-four cars passed over both legs at and below the knees. The temperature was below zero and he laid beside the track for nearly half an hour before found and relief came. The ambulance surgeon could not find pulse or respiration and hesitated about bringing an apparently lifeless body to the hospital. Upon arrival at the hospital there was no improvement and half a pint of whisky was administered per rectum, this being followed by *one-fifth* grain of strychnia sulph. in *divided doses* during the next hour, when another half pint of whisky was given as before, external heat being applied by the use of hot water bottles.

After the first hour, reaction became marked, the patient's condition materially improved and at the end of the second hour he became conscious; an operation thought advisable and I was called. I found the patient quite warm and all external evidences of shock very rapidly passing away. Pulse about 140 per minute. Operation commenced at five minutes past 1 o'clock A. M. Completed in forty-seven minutes. Patient placed in bed and external heat continued. During the operation he was given nine and one-half drachms of whisky hypodermically and one-half drachm of tincture of digitalis. Condition at the end was better than at the beginning of the operation, and at 8 o'clock the same morning he was reading of his injuries in a morning newspaper.

He progressed well for several days, when sloughing of both stumps began, which I believe to have been entirely due to their being frostbitten on the night of injury, although at the time of operation the

DANIELS—SYNCHRONOUS AMPUTATION. CASE V.

DANIELS—SYNCHRONOUS AMPUTATION. CASE VI.

tissues appeared to be in a healthy condition, and to add to the complications was the breaking out of tertiary form of specific disease, seven large ulcers appearing simultaneously. The smallest was larger than a silver dollar and largest about two by three and one-half inches, three of them being upon the thighs which added to the difficulties of dressing the stumps. He was placed upon the "mixed treatment" and has made good progress, all external evidence of the disease having disappeared.

DANIELS—SYNCHRONOUS AMPUTATION. CASE VII.

On account of the sloughing of the stumps and protrusion of the bones, another operation became imperative and five weeks after the injury I re-amputated both thighs, synchronously. He has recovered without a bad symptom and is as cheerful as his pleasant face in the photograph indicates.

DEDUCTION.

In all of these cases I used the precautions known to modern surgery in the way of antiseptic treatment and dressings, each of the limbs being carefully shaved and sterilised, the dressings being of the most approved kind. I use the skin flaps exclusively, and, what I deem as an important point, after the amputation of one extremity, before closing the flaps I amputate the other, in order to watch for any possible hemorrhage that might occur; and after making the second amputation I leave that wound open until

I carefully inspect and close the primary one, being sure to tie or use torsion upon every bleeding point. I believe success is largely due to the care used in preventing hemorrhage. Aseptic catgut ligatures were used in each instance and silk sutures in closing the flaps. I found no use for drainage-tubes, but invariably left a small opening at the lower angle of the wound for drainage purposes, and in those cases where there was not union by first intention I dressed as frequently as the bandage became soiled in the least.

I am a strong advocate of free stimulation immediately before and during the progress of the operation, and believe its value has been fully demonstrated in the series that I have presented. It proves the adage that "heat is life and cold is death." I do not advise operating during the degree of profound shock, neither am I ambitious to operate upon a patient in a moribund condition; but to stimulate freely, and to keep it up even to a degree of semi- or complete intoxication. After the operation warmth should be applied externally by the use of hot bottles, as described. I believe it will save many cases that otherwise would die under the knife.

I prefer hypodermic and rectal stimulation, as the stomach may be inactive, in sympathy with the general condition, and eject its contents. Ordinarily brandy or whisky will suffice, yet if the patient is very low before operating or shows signs of sinking during the operation I add 50 per cent. of clear ether to that given subcutaneously.

As to the time of beginning operation I think it should be done as soon as reaction has set in, not necessarily waiting until it is complete. As soon as moderate warmth of the body occurs, proceed with the work. Although this experience is comparatively limited, yet I am pleased to report seven consecutive recoveries.

315 JERSEY STREET.

ENTERIC FEVER COMPLICATING PREGNANCY.

BY G. A. HIMMELSBACH, M. D., Buffalo, N. Y.,

Clinical Instructor in medicine, University of Buffalo; Assistant Visiting Physician to the Buffalo General Hospital.

IN THE *Medical News* of May 18, 1895, I reported a case of enteric fever with recovery, complicated by pregnancy and treated according to the Brand method. The following clinical memoranda record two more similar cases which have come under my observation since that report. The saying that rare cases come

in groups was aptly illustrated in these cases and a remarkable coincidence was the fact that both patients were ill at the same time, lying side by side, coming from widely separated parts of the city, each apparently at about the same stage of the fever and both pregnant of nearly the same duration. I may also add that they were the only cases of typhoid fever in the hospital at the time.

CASE I.—J. H., aged 31 ; married ; had one child eleven years ago. She entered the employ of the hospital as a laundress and had worked but two weeks when she was taken suddenly ill with a sharp, stabbing pain in the lower right chest in the axillary line. Her temperature was 103° F.; pulse, 120 ; respiration, 34. Physical examination showed diminished vesicular breathing, a few crackling râles and later a broncho-vesicular breathing. The percussion note was not much changed, had slight hacking cough but practically no expectoration. Dry cups were applied several times to the affected area, a wadded pneumonia jacket put on and a mild expectorant mixture given internally. Frequent observations were made, but at no time was I able to make out any definite area of consolidation. About the fifth day I noticed a few scattering petechiæ on the abdomen and chest and on more minute examination I found some meteorism, a slight tenderness in the right iliac region, constipation, heavily coated tongue, dry fissured lips, a peculiar breath, epistaxis and slight headache. Diagnosis: typhoid fever with a broncho-pneumonic complication. Dr. Hopkins saw the patient and confirmed the diagnosis. She was four months pregnant, but notwithstanding this, the treatment of cold plunge baths, when the temperature reached 102½° F., as suggested by Brand, was instituted immediately. The pyrexia responded promptly and effectually to the plunges, only seven in all were given and in a short time cold sponge baths supplanted the tub. The fever ran only a moderately severe course, ranging from 101° to 104.6° F., until the twentieth day, when a change in the temperature curve and a general improvement was appreciable. Convalescence uninterrupted. Discharged July 13th.

CASE II.—A. J., aged 20 ; married one and one-half years. She said she had felt tired and languid for some time past, but was confined to bed only seven days prior to her entering the hospital. Upon admission her temperature was 104° F.; pulse, 144 ; respiration, 28. Urine, twenty-four hour specimen, 470 cc., turbid, acid reaction, offensive ; specific gravity, 1,027 ; urea, 12.69 grams ; no albumin, no sugar. Physical examination of the lungs and heart, negative. She complained of difficulty of deglutition, the cervical and sub-maxillary lymphatic glands were markedly swollen on both sides. The tonsils were not hypertrophied, but the posterior buccal wall was roughened and congested and gave the appearance of a post-diphtheritic throat. The abdomen was somewhat tympanitic, the percussion note over the cecum resonant,

the area of splenic dulness increased. Deep, but gentle, pressure in the right iliac region was responded to by tension of the muscles and evidence of tenderness. She complained of daily headaches, particularly when the pyrexia was high, bowels constipated, tongue parched and heavily coated, teeth covered with sordes, lips dry and cracked, some twitching of the muscles and picking at the bed clothes. She had a few scattering spots on the abdomen and chest, but they were not the typical rose-colored spots of typhoid. She had not menstruated in three months, and this coupled with the increased size of the breasts, darkened areola and presence of an abdominal tumor, assured me that I had another case of typhoid complicated with pregnancy. She was put upon the Brand treatment. Her temperature ranged from 100° to 104.5° F. until the fifteenth day of her illness. After five or six days, plunging was discontinued. Convalescence uneventful. Bimanual examination now showed the presence of a gravid uterus of four months.

It will be observed from the foregoing reports that neither of these cases presented the regular stereotyped picture of enteric fever. The former was not only pregnant, but also had the pneumonic complication. The latter was pregnant between three and four months and had the cervical and sub-maxillary swelling which was probably metastatic.

Conclusion.—Although these three cases are by no means sufficient to base reliable conclusions upon, yet it is a curious fact that in these cases of typhoid fever complicated with pregnancy of from three to five months and treated with plunge baths, all presented at the onset a severe and grave type of the fever; all responded quickly to the baths *without in any way interfering with the pregnant state.* In all, the symptoms improved generally and the whole course of the fever was modified. The question arises, Are the plunge baths responsible for curtailing and modifying the disease, or does the pregnant state mitigate the intensity and severity of enteric fever?

137 WEST TUPPER STREET.

HYPODERMATIC PURGATIVES.—Ewald, of Berlin, (*Med. Chronicle,*) maintains that a mixture of equal parts of caffeine and chloral, in a one to five solution, when administered subcutaneously in doses of fifteen minims, will act as a purgative. He employs it particularly in acute rheumatism, where it also appears to act as a sedative.—*Medical Age.*

OBSTRUCTIONS WITHIN THE UPPER RESPIRATORY TRACT OF CHILDREN; THEIR RELATION TO GENERAL HEALTH.

By HENRY J. MULFORD, M. D., Buffalo, N. Y.,

Clinical Instructor in diseases of the nose and throat, Medical Department, University of Buffalo.

THE physician is the first event in the child's life. It is his duty to see that the new life begins without embarrassment; his duty to watch that no embarrassment can occur. Periodical examination of the child must be insisted upon. At the very hour of birth, trained inspection should be begun. Many faults and ills might be avoided if there were inspection at regular intervals from birth to adult life.

Within the upper respiratory tract of the child lurks a constant source of danger. It is here tissue overgrowth does most harm; the harm of slow obstruction and of long-standing irritation. It gives no fear of sudden death; this blocking of life's gateway causes worse than death—stupidity. So familiar are these conditions of obstruction, that we dismiss them as trivial. But to their presence is due the failure of many a life. In a situation easy of access they are recognised without difficulty; only carelessness avoids them. One glance is enough, the face itself tells the story. In long-standing obstruction it is the face of dull stupidity—the physiognomy of pressure.

The commonest conditions giving danger to the child arise from overgrowth of tissue within the vault, and hypertrophy of tonsils within the pharynx. They work harm in three ways: by obstructing respiratory currents; by diverting respiratory currents into the wrong channel; and, reflexly. To illustrate, here is presented a limited number of cases showing conditions leading to the above results.

Case I.—November, 1894. E. S., boy, aged 6 years; measles three years ago; tonsils large since; lately very large. Has nightmare, very nervous, no appetite. Dark circles under eyes, extreme anemia; mouth breather. Removed both tonsils under chloroform; hemorrhage slight, recovery prompt. Administered liquor Dobell locally and syr. ferri iodid. internally. Ten days after, reported marked improvement in general condition. At this writing none of above symptoms are present.

Case II.—May, 1893. L. G., boy, aged 9 years; sore throat and cough for several weeks; more or less trouble with throat all the time,

nose occluded. Very anemic, weak; appeared delicate. Hypertrophy of both tonsils; hypertrophy of tissue within pharyngeal vault; pigeon breast. Removed all hypertrophied tissue under chloroform; no hemorrhage; recovery good, but slow. Administered liquor Dobell locally and syr. ferri iodid. internally. An acute pharyngitis followed operation; after one week, did well. Rapid return to strength and health.

CASE III.—March, 1895. T., girl, aged 18 years; throat trouble for more than a year; frequent sore throat; frontal headache; constant cough; appetite poor. Both tonsils greatly hypertrophied. Tonsils removed without anesthetic; sharp arterial hemorrhage for ten minutes. Administered locally the following: Acid tannici, gr. xx.; liquor Dobell, f℥iv.; locally. Four days after operation, seat of operation acutely inflamed; responded to treatment readily. One month after operation cough and headache had disappeared; appetite returned.

CASE IV.—June, 1894. M. H., girl, aged 5 years; frequent sore throat and earache; mouth breather. Pharyngeal vault small, filled with hypertrophied tissue. Removed under chloroform and ether; no hemorrhage. Used liquor Dobell locally. Recovery good. No more earache.

CASE V.—March, 1895. J. M., girl, aged 7 years; scarlet fever last Summer; since then throat trouble. Nervous, sleeps poorly, with mouth open. Tall and poorly nourished. Both tonsils and tissue of vault hypertrophied. All removed under chloroform; no hemorrhage; recovery good. Regained normal condition rapidly.

CASE VI.—January, 1895. S. B., girl, aged 11 years; takes cold easily; frequent sore throat, nose occluded. Mouth breather, tall, anemic, nervous, restless during sleep. Tonsils very large; vault well filled. Removed all under chloroform; slight hemorrhage, recovery prompt. Administered the following: Acid tannici, gr. xx..; liquor Dobell, f℥iv., locally; syr. ferri iodid. internally. Return to normal rapid.

CASE VII.—January, 1895. A. K., girl, aged 2 years. This baby was very poorly nourished; child of poor parents. Slight; extreme anemia; diarrhea; mouth breather. Pharynx and vault filled with hypertrophied tissue. All removed under chloroform; no hemorrhage, recovery good. Did well for a time; condition recurred after six months.

CASE VIII.—October, 1893. E. G., girl, aged 8 years; frequent sore throat; cough; short of breath; nightmare; mouth breather. Both tonsils greatly hypertrophied. Removed under ether; no hemorrhage; recovery good. Entire improvement.

In tonsillar hypertrophy alone (Cases I., II. and VIII.) there is simple obstruction to inspired air, whether it comes through nose

or mouth. This means too little oxygen within the lungs; it means an arterial blood little better than the venous.

Tissue hypertrophy within the vault occurred alone in Case IV., and diverted respiratory currents from nose to mouth. The mouth, fashioned for mastication, cannot perform the function of the nose. We do not know all that occurs within the nose while the air is passing, but we do know that through the mouth the air reaches the lungs improperly prepared. In this condition there is also impairment of digestion. Mastication is performed hurriedly in a cavity to which fresh germ-laden air is admitted constantly. One cannot masticate properly and breathe through mouth at the same time. There is a nervous desire to empty mouth quickly. Consequently the stomach suffers.

Either of above conditions alone is burden enough for a growing organism. When the two are combined in one individual, (Cases II., V., VI., VII.,) the result is most pernicious. Added to the disturbances of nutrition there is profound nervous irritability. Irritated nerves, fed by poor blood, point to ruin. In each of the eight cases the general irritability was marked; in four of them there was in addition a specially well-marked reflex. In Cases II. and VIII. there was cough; in III. there was cough and headache; in IV., earache. They all disappeared after operating.

The cases quoted are but a few of those met frequently. They are given for emphasis. Many phenomena spring from the conditions mentioned, but all are in the same line and all tend to the same result—the ruin of the individual. They show the mistakes of nature, and they show how those mistakes may be corrected and overcome. The welfare of the state depends upon its people. So long as the child fashions his own manhood in his own way and out of poor material, there will be poor citizens. He needs only care. Give the boy health and proper training, and he becomes a citizen fit to endure life. He is a prophet of the future. It is our fault if the prophesy does not come to pass.

466 FRANKLIN STREET.

HYSTERIOCLASIC ZONES.—Dr. Clozier, of Paris, says that in hysterical patients strong pressure over the apex of the heart applied for about thirty seconds sometimes stops attacks of hystero-epilepsy, hallucinatory conditions and nervous cough.—*North American Practitioner*.

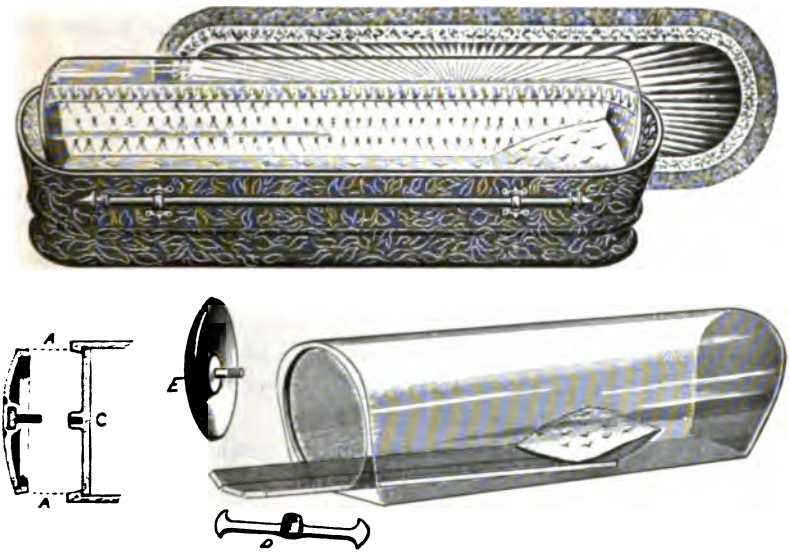
New Inventions.

A SANITARY BURIAL CASKET.

By JULIAN P. HILL, M. D., Buffalo, N. Y.

THE safest and most humane disposition of the dead has been one of the perplexing problems of sanitarians from time immemorial; and of all the various methods adopted by civilised tribes or nations, but two have been handed down to us, namely—cremation and interment.

Cremation was a very early and widespread usage of antiquity, dating as far back as the "bronze age," extending down the cen-



HILL—SANITARY BURIAL CASKET.

turies to the Christian epoch, when it was almost entirely suppressed. Of late years it has been strongly re-advocated from a hygienic and sanitary standpoint, and as vigorously denounced on the ground of sentiment and religion.

The prevalent mode of disposing of the dead since the beginning of the Christian era has been interment in some field consecrated for this purpose only. The advantages and disadvantages of these two methods are about equal, the safest being cremation, while the most humane and indulgent is burial.

To combine the advantages of the two and minimise their disadvantages has been the aim of the writer in devising the sanitary burial case which is here described for the first time.

This burial casket is constructed entirely of glass, forming a cylinder with a flattened base, closed at one end; at the other, a circular opening, into which fits a circular end-piece (E). The edges (A) of the end-piece are ground, fitting snugly into the circular opening, and it is held securely by being screwed into a cross-bar (C and D) placed on the inside of the casket. The remains are placed upon a properly draped slab and then introduced into the casket; the end-piece is screwed into the cross-bar, the ground surfaces come into contact and the body is preserved in an air-tight compartment for burial. If desired the glass casket may be placed in the ordinary wooden case, as shown in the illustration, or it may even be cremated along with the remains.

The special advantages of this glass casket, besides retaining the features of the Christian form of interment, are:

1. Its lightness, cheapness and durability.

2. The avoidance of all danger from gases emanating from the body while exposed to view or during transportation to place of interment, making it almost indispensable in times of epidemic.

3. The protection of the remains from the action of the soil, water and earth-worms.

4. Preventing saturation of the soil with the fluids of decomposition, their evaporation and the pollution of the atmosphere in the neighborhood of cemeteries.

These have been the drawbacks of the ordinary casket, making them the disseminators of contagion and their biding places the foci of contamination.

THE RESUSCITATION OF STILL-BORN INFANTS.—Bedford Brown (*Am. Jour. Med. Sciences*) says: During the past three or four years, in several cases of this kind, apparently under the most hopeless circumstances, when all other methods have failed, he has resorted to hypodermatic injections of brandy or whisky with the most satisfactory results. The amount used is five or six drops in first one arm and then in the other, fifteen drops being the largest quantity used in a single case. If the mother has suffered alarming ante-partum hemorrhage, and the infant has been drained of blood before its birth, this method can avail nothing.

A. R. DAVIDSON, M. D.
1879—1888.

FRANK H. POTTER, M. D.
Obit., July 16, '91.

F. R. CAMPBELL, M. D.
Obit., Sept. 14, '88.

Editor and Associate Editors Buffalo Medical Journal.

Special Article.

1845—THEN AND NOW—1895.

Fifty Years of Medical Journalism in Buffalo—A Historical Reminiscence—Medical Journals—Medical Colleges—Hospitals —Medical Societies.

I.—The Buffalo Medical Journal.

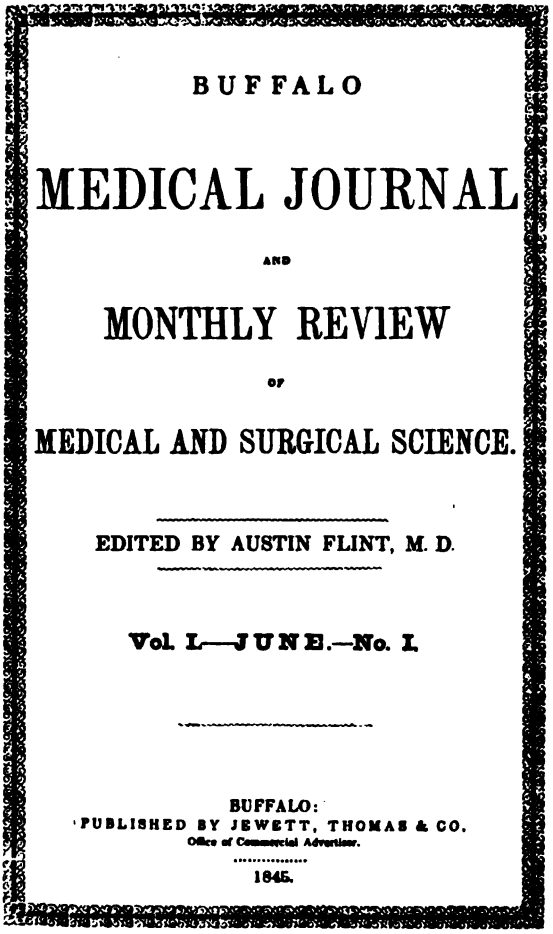
Epoch I.—1845–1855.

IN JUNE, 1845, the first number of the Buffalo Medical Journal was published, under the editorship of Dr. Austin Flint, who was also its founder and owner. It was printed by Jewett, Thomas & Co., at the office of the *Commercial Advertiser*, and consisted of twenty unleaded standard octavo pages, in long primer type. It contained an introductory by the editor that occupied two pages and a quarter; notes of a European tour, by Dr. F. H. Hamilton, professor of surgery in Geneva medical college; cases of acute rheumatism treated with nitrate of potash in large doses, by Dr. Alden S. Sprague; case of aortitis, with autopsy and remarks, by Dr. George N. Burwell; case of hydrophobia, reported by Dr. James P. White, and cases of midwifery with twins at different stages of development, by Dr. H. N. Loomis. The last four pages of this number were filled with paragraphs under the general head—*editorial, medical intelligence, bibliographical notices*, etc.

This was the first medical journalistic venture between New York and Cincinnati or St. Louis, in the southwest, and naturally arrested the attention of the medical fraternity between the Atlantic and the Mississippi. Its establishment was the result of much thought on the part of the editor, many conferences with his professional colleagues and not a little perturbation of spirit among those interested in its success.

At that time Buffalo contained less than 30,000 inhabitants, and though there were about seventy physicians of all sorts and conditions, one half of which were regulars, there was yet no organized medical society nor other cohesive force or center round which physicians might rally. Nevertheless, the journal was a success from the start, as might be expected from the energy and

character of the man who had seated himself on its editorial tripod, as well as those who were his immediate advisers. The first volume contained only 284 pages; but the second volume grew to the aggregate of 758 pages, so great was the demand for space.



BUFFALO

MEDICAL JOURNAL

AND

MONTHLY REVIEW

OF

MEDICAL AND SURGICAL SCIENCE.

EDITED BY AUSTIN FLINT, M. D.

Vol. I.—JUNE.—No. I.

BUFFALO:
PUBLISHED BY JEWETT, THOMAS & CO.
Office of Commercial Advertiser.

1845.

FACSIMILE OF FIRST COVER-PAGE OF FIRST NUMBER OF BUFFALO MEDICAL JOURNAL, ONE-THIRD SIZE.

Mr. James N. Matthews, afterward editor and proprietor of the *Buffalo Morning Express*, and the head of the famous art printing house of Matthews, Northrup & Co., worked as a compositor on the first numbers of the JOURNAL, and he informed the writer,

in a conversation held a few months before his death, that at first he experienced great difficulty in deciphering Dr. Flint's "copy."

The history of the BUFFALO MEDICAL JOURNAL involves the history of the medical profession in Buffalo for the past fifty years. In its pages are recorded the principal medical events that

JAMES N. MATTHEWS,
First compositor on the BUFFALO MEDICAL JOURNAL,
Editor and Owner *Buffalo Morning Express.*

have occurred here during the half century of its existence, some of which have been given with considerable detail. It contains the reports of clinical cases that served to make the men of that period famous. In its fourth number is published the first information concerning the true nature of the infection of typhoid fever. A well at North Boston, Erie county, became poisoned by

VIEW OF BUFFALO, 1845.

the excreta of a typhoid patient brought from Massachusetts. Twenty-one cases occurred in five families, all living within a few rods of the fatal well and deriving their water supply from that source, of whom seven died. Dr. Austin Flint visited the locality, diagnosticated and traced an infectious disease, then unknown in this region, from New England to the hamlet of North Boston, dis-

JAMES PLATT WHITE, M. D.

tinctly established its contagion and pointed out its source. Nothing was omitted that could contribute to the completeness and convincing power of the evidence adduced; the published report has become a classic in medical literature, and it formed the basis of a series of essays published in this journal by the distinguished investigator. This was Dr. Flint's first conspicuous success, and it is more than probable that it laid the foundation for his future fame as a clinician.

Dr. Frank Hastings Hamilton published in the pages of this journal his surgical clinics and fracture tables, from which sprang

thematerial to construct his treatise on fractures and dislocations, a work that stands unrivaled as authority on the subject; it is a recognised classic in every country and in all tongues where medicine is known as a science.

Dr. James P. White lent his powerful influence in support of the JOURNAL from the first, and published in its columns essays and clinical reports, on which was laid the basis of a medical career that so justly made him famous in two hemispheres.

FRANK HASTINGS HAMILTON, M. D.

Dr. Flint conducted the JOURNAL as sole editor from 1845 until 1853,—eight years,—when, having been invited to teach the practice of medicine at Louisville, Ky., it became necessary to transfer it to other hands. Meanwhile, a young man from the country had been contributing a series of articles to its columns under the name of "Smelfungus," that had attracted great attention, on account of their rare wit, wisdom and originality. Circumstances arose, which will be alluded to hereafter, that made it convenient for this young physician to transfer his residence to Buffalo. Recognising his talent and fitness for the work, Dr. Flint made haste to invite "Smelfungus" to become associated with him in the editorial conduct of the JOURNAL. Thus, Dr. Sanford B. Hunt,—"Smel-

fungus" no longer,—without experience in journalism—indeed, almost without experience of any kind—by force of fortuitous circumstances, became practically the editor-in-chief with the issue for July, 1853. The wisdom of this choice on the part of Dr. Flint was never challenged, and two years later he conveyed his entire interests in the JOURNAL to Dr. Hunt; so, in June, 1855, the latter became sole editor and proprietor. Dr. Flint had, meanwhile, transferred his labors to other fields, after having been for a decade closely identified with the interests of the magazine, most of the time as sole editor and owner. With his departure closes what may be termed the first epoch of the JOURNAL.

EPOCH II.—1855–1860.

During Dr. Hunt's administration, from 1853 to 1858, it may be said that the JOURNAL enjoyed the most brilliant period in its career. Putting his whole talent and energy into the work, the editor soon made his journal famous, not less for the sparkling originality of its editorial department, than for its journalistic *esprit de corps*. Dr. Hunt was a ready writer, an original thinker and a companionable man. Indeed, he was a genius with special aptitude for editorial work. His ideas ran so much faster than his pen that it was difficult for him to keep his thoughts in check while his pen caught up to his expressions. What a blessing to him the present fashion of stenographers would have been.

It was during this epoch that the journal had its first experience as defendant in a libel suit, an experience that has been repeated once since, yet with less material benefit to the plaintiff. The circumstances leading to the first one may be thus briefly summarised: Dr. John D. Hill had been expelled from the medical society of the county of Erie for a violation of its rules, and the JOURNAL had seen fit to make fearless and independent comment thereon. Fancying himself injured thereby, he brought suit for libel against the editors, Drs. Flint and Hunt. The result was announced in the issue for March, 1856, as follows: "In the libel suit brought by Dr. John D. Hill vs. Austin Flint and Sanford B. Hunt, as editors of the BUFFALO MEDICAL JOURNAL, which has come to trial since our last issue, the jury—(and *such* a jury!)—brought in a verdict of damages to the plaintiff to the amount of $500." Dr. Hill was subsequently restored to membership in the society and in 1887 was chosen its president.

In addition to his duties as editor, Dr. Hunt was professor of ana-

tomy in Buffalo medical college and city editor of the *Commercial Advertiser*. Eventually he became anchored at the editorial desk of this daily newspaper, and surrendered the professorship above alluded to. A little later he was elected superintendent of public schools in Buffalo, soon after which the war came. He enthusiastically joined the army as surgeon of U. S. volunteers, and in 1863 was placed in charge of convalescent camp near Alexandria, Va. After the war he edited the volumes known as the history of the U. S. sanitary commission, and upon completion of this task he became editor of the Newark, N. J., *Daily Advertiser*. Finally he purchased the Sunday edition, known as the *Sunday Call*, now conducted by his son. In January, 1884, he was seized with a fatal illness, of which he died at Irvington, a suburb of Newark, April 26, 1884. His ashes repose in Forest Lawn, at Buffalo. The writer was his pupil in 1854–55, and feels it but just to make the foregoing record somewhat detailed in regard to his illustrious preceptor.

From 1858 to 1860, Dr. Austin Flint, Jr., was the editor and proprietor. Now came a period of disaster. This arose from divorcing the editorial and publishing departments. The prosperity that had hitherto attended the JOURNAL seemingly was at an end. Mr. A. I. Mathews, the then well-known druggist, obtained its ownership and soon prostituted its advertising columns to the printing of quack advertisements. Thereupon the profession withdrew its support and as a consequence the JOURNAL ceased publication. The fifteenth volume closed with the issue for May, 1860, and with it the second epoch came to an end.

EPOCH III.—1861–1879.

The circumstances that led to the suspension of the publication of the JOURNAL need not be discussed in detail. Suffice it to say that Dr. Austin Flint, Jr., who resisted the action of the druggist before alluded to, with all his might, had moved to New York, and that the mismanagement of the publisher, Mr. Mathews,[1] led to a loss of confidence of the professional public in its usefulness and integrity. Without this confidence no medical journal can exist. Plans soon began to be discussed among leading medical men looking to its resuscitation, but these were always embarrassed by the fact that Mr. Mathews owned a proprietorship in the name and fame of the defunct journal.

Finally, however, these difficulties were overcome, and in

1. This Mathews must not be confounded with Mr. James N. Matthews, whose picture appears on page 67.

August, 1861, the journal was revived under the able editorship of Dr. Julius F. Miner, the well-known surgeon. A slight modification in name, however, became necessary, so it was called the BUFFALO MEDICAL AND SURGICAL JOURNAL AND REPORTER. It required no little courage and energy on the part of its editor to

Millard Fillmore

launch a medical journal at the time mentioned. The country had just plunged into civil war, and there was as a consequence deep commercial depression and distress, a period unfavorable for the commencement and growth of any enterprise requiring outlay of thought and expenditure of money. But the physicians of Buffalo had learned to appreciate the value of a good medical

journal, all the more, perhaps, since they had been deprived of their own. So, nothing daunted, the indefatigable editor issued the first number of the new journal, which was in reality only a reëstablishing of the old one. The first number contained thirty-two pages, and the first volume an aggregate of 380 pages. With the beginning of the second volume of this new series the words "and Reporter" were dropped from its title, and it has been published since that time under the name of the BUFFALO MEDICAL AND SURGICAL JOURNAL. With a view, however, to simplicity, it will now resume its former name and will be known hereafter as the BUFFALO MEDICAL JOURNAL. For eighteen years Dr. Miner continued to edit and publish the JOURNAL, but he was assisted a portion of the time by Dr. Edward N. Brush, as associate editor. Dr. Brush is now superintendent of the Sheppard Asylum for the Insane in Baltimore county, Md.

During the period of the war the pages of the JOURNAL became a historical record of the medical officers who entered the military service from Buffalo and vicinity. In June, 1869, is found a record of the first application of the principle of enucleation to ovarian and other abdominal tumors as performed by its originator, the editor, Dr. Julius F. Miner.

EPOCH IV.—1879–1895.

In 1879, Dr. Miner's failing health warned him to give up a portion of his work, the necessity for which had been a long time foreseen by his friends. Consequently the JOURNAL was sold to a syndicate, composed of Drs. Thomas Lothrop, A. R. Davidson, Herman Mynter, Lucien Howe and P. W. Van Peyma, whose administration began with volume XIX., new series, August, 1879. The first volume published under the new management contained 556 pages printed with small pica type—a larger size than that used in the preceding issues. With volume XXII., beginning August, 1882, the names of Drs. Howe and Mynter disappeared from the editorial staff, and two years later Dr. Van Peyma retired, leaving the JOURNAL in the hands of Drs. Lothrop and Davidson, the latter continuing as managing editor until his death, May 25, 1888.

In July, 1888, Dr. Davidson's interest in the magazine as well as his functions as managing editor passed to the hands of Dr. William Warren Potter, who has continued in their exercise since that time. The three editors during the first series are dead; so too are Dr. A. R. Davidson, former managing editor, and Drs. F. R.

Campbell and Frank Hamilton Potter, associate editors, whose obituaries have heretofore appeared in these columns. Thus, since the establishment of the JOURNAL, fifty years ago, six deaths have occurred in its editorial ranks. We present in this issue pictures of these our illustrious deceased predecessors and collaborators.

It would be manifestly improper in this article to speak in detail of the JOURNAL'S record during this epoch. It is too recent

THOMAS F. ROCHESTER, M. D.

and too well known to discourse upon now with due regard for delicate propriety. The editors chiefly responsible for its course are still at work striving to make it deserving of continued respect and confidence. Perhaps the historian of the future may have something to say of the fourth epoch in the JOURNAL'S career.

During the lifetime of the JOURNAL nearly all the improvements in medicine and surgery that are valuable have been developed, for it must be remembered that it has witnessed the introduction of anesthesia; the perfection of the stethoscope; the practical use of

the speculum, the laryngoscope, the otoscope, the ophthalmoscope and the endoscope; the use of the clinical thermometer; the invention of the sphygmograph, the hypodermic syringe, the aspirator and the Esmarch bandage; the revelations of the microscope; asepsis and antisepsis as applied to surgery and obstetrics; the rise and progress of the science of bacteriology; the development and perfection of abdominal surgery as related to the removal of new growths; the repair of the intestines for traumatism; the surgical treatment of appendicitis; the surgery of the gall-bladder; the rise and development of gynecological surgery; improved methods in treatment of fractures—all these the JOURNAL has witnessed and recorded in its pages, besides many others of great importance which neither time nor space permit us to mention. Whoever, therefore, has been wise enough to preserve and bind his journals from the outset has a valuable record of progress in medical science.

Though a number of journals have appeared in Buffalo during the lifetime of this one, they have, speaking generally, been short-lived and are now extinct. At the present time it is the only medical journal published in the area bounded on the north by Toronto, on the east by Rochester, on the south by Pittsburg and west by Cleveland and Detroit. The *Buffalo Dental Advertiser*, a quarterly, is a magazine that the JOURNAL is proud to acknowledge as a neighbor.

As a testimonial to the valued support that the JOURNAL has received from its contributors, subscribers and advertisers it now offers itself in an enlarged form and a new dress, for it well understands that it cannot hope to succeed without the continued favor of the medical profession, which it has enjoyed so long. It proposes to do all it can to deserve a continuance of professional approbation. It will continue in the future, as in the past, to attempt to reflect the opinions of the whole profession of medicine in this region on scientific questions and on the progress of medicine, and it proposes to labor anew to maintain the unification of the profession and for the advancement of medical science. It is especially devoted to the principles of higher medical education, and believes that these principles are best exemplified in the maintenance of state medical examining and licensing boards. It will advocate the establishment of such boards in those states that have not yet adopted the plan, as well as a higher standard of preliminary education.

This is the fiftieth year of its publication. While it is old in

years, it must be young in activity, and it proposes to indicate its youthfulness by donning new garments, manifesting new energy, increasing the number of its pages, and otherwise improving itself so as to make it worthy to stand in the front rank with the best

GENERAL ALBERT J. MYER.

medical journals of the land. In greater Buffalo there will be a greater BUFFALO MEDICAL JOURNAL.

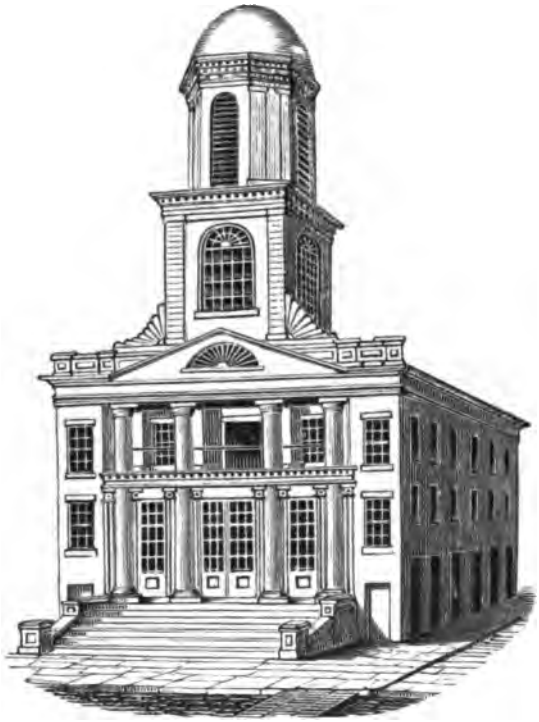
II.—MEDICAL COLLEGES.

MEDICAL DEPARTMENT, UNIVERSITY OF BUFFALO.

EPOCH I.—1846–1850.

In 1846, authority was granted by the legislature of New York permitting the establishment of a medical school at Buffalo under a university charter. The subject had been agitated for several

years, but formal steps preparatory to the application were not taken until the autumn of 1845. Public announcement of the success of the enterprise was made in the BUFFALO MEDICAL JOURNAL, September, 1846, stating that the medical department had been fully organized by creating seven professorships, to which the council of the University had made the following appointments: Chemistry and pharmacy, James Hadley, M. D.; physiology and medical jurisprudence, Charles B. Coventry, M. D.; general and special



FIRST BUFFALO MEDICAL COLLEGE, WASHINGTON AND SENECA STS.

anatomy, James Webster, M. D.; pathology and materia medica, Charles Alfred Lee, M. D.; principles and practice of surgery and clinical surgery, Frank Hastings Hamilton, M. D.; obstetrics and diseases of women and children, James Platt White, M. D.; principles and practice of medicine and clinical medicine, Austin Flint, M. D. Five of the seven chairs above named were filled by incumbents of professorships in Geneva Medical College which soon afterward was discontinued. Dr. Hamilton removed to Buf-

falo, Dr. Webster retained his residence in Rochester, Dr. Coventry continued to reside in Utica and Dr. Hadley's son, George, delivered the chemistry lectures from the first. One other name deserves mention in this connection,—that of Corydon L. Ford, M. D.,—who was appointed demonstrator of anatomy and who afterward became one of the most famous anatomists of modern times. Drs. White and Flint were the chief promoters of this college enterprise, though they were ably seconded by Mr. O. H. Marshall and other gentlemen not physicians. Hon. N. K. Hall,

THE SECOND BUFFALO MEDICAL COLLEGE—MAIN AND VIRGINIA STREETS.

afterward postmaster-general, was the representative in the assembly whose chief efforts obtained the charter. Millard Fillmore, then president of the United States, was the first chancellor of the University, an office which he continued to fill until his death, March 8, 1874. His portrait, given on p. 73, is from a steel engraving taken about the time he was president. Thus began the first permanently successful effort to establish in Buffalo an educational institution above the grade of common schools.

The first course of medical lectures opened February 24, 1847, with an attendance of sixty-six registered students, one of whom

was Mr. L. G. Sellstedt, the distinguished artist, of this city, who was taking an optional course. The council of the university leased for a term of years the First Baptist church, that then stood on the corner of Seneca and Washington streets, the site of the present post office building. The BUFFALO MEDICAL JOURNAL announced, in its issue for December, 1846:

> The council has been fortunate in obtaining a building admirably adapted for a medical college. Had it been erected with a view to this purpose it could hardly have been improved. A pictorial representation of the college accompanies the annual circular which has lately been issued.[1]

This building was used by the college during its first three academic years.

EPOCH II.—1850–1893.

In 1849, the construction of the building on the corner of Main and Virginia streets was begun. It was completed in season for the fourth lecture course, 1849-50, at a cost of about $15,000. Public-spirited citizens gave the building and made no reckoning, among whom were A. D. Patchen, whose name heads the list with a subscription for $500; next came Jesse Ketchum, who gave $600, the largest single donor, and then followed in their order, A. H. Tracy, $200; George W. Tifft, $200; E. G. Spalding, $200 and Jabez Goodell, $200. There were eighty citizens who subscribed $100 each, and the remainder was raised in sums of $40 and $60, until the aggregate reached $12,000. The state gave $2,000 which made a sufficient amount to warrant the commencement of the construction of the new edifice. It was during this fourth year that Dr. White introduced demonstrative or clinical midwifery, a method of teaching that had already been established in Europe, but had never been attempted before in this country. A woman two weeks before confinement entered the janitor's apartments, where she boarded, and was cared for by the janitor's wife. After labor began the graduating class, 22 in number, assembled in an adjoining room and one by one, under the supervision of Professor White, they were admitted to the confinement room and were permitted to make vaginal examinations during the progress of labor. On the termination of the second stage all were assembled in the lying-in room and per-

1. We have succeeded in finding an old cover page of this circular, kindly loaned by Mrs. S. J. Reid, Prospect avenue, Buffalo, from which an exact copy is given on page 78.

mitted to witness the passage of the head over the perineum and the method employed to support the latter. This was all: there was no undue exposure of the woman and she made rapid convalescence, yet seldom has an event occurred that so completely shook the foundations of society in any city as did this. The newspapers commented upon it, doctors denounced it as "immoral" and a suit for libel followed. A scathing critique signed "L" appeared in one of the daily newspapers reflecting so intemperately

MILTON GROSVENOR POTTER, M. D.

upon Dr. White's course, that he promptly brought suit for libel against Dr. Horatio N. Loomis, the supposed author of the article. A trial ensued lasting four days, able counsel appeared on both sides, two stenographers were employed by the complainant (this was before the days of court stenographers) and a full report was made and published to the world. Much stress had been laid by the counsel for the defendant upon the fact that "public opinion" placed the stamp of its emphatic disapproval upon the course of Dr. White. Mr. Justice Mullett, who presided at the trial, swept

all such fallacies from the jury box in a terse and eloquent charge, from which we quote as follows:

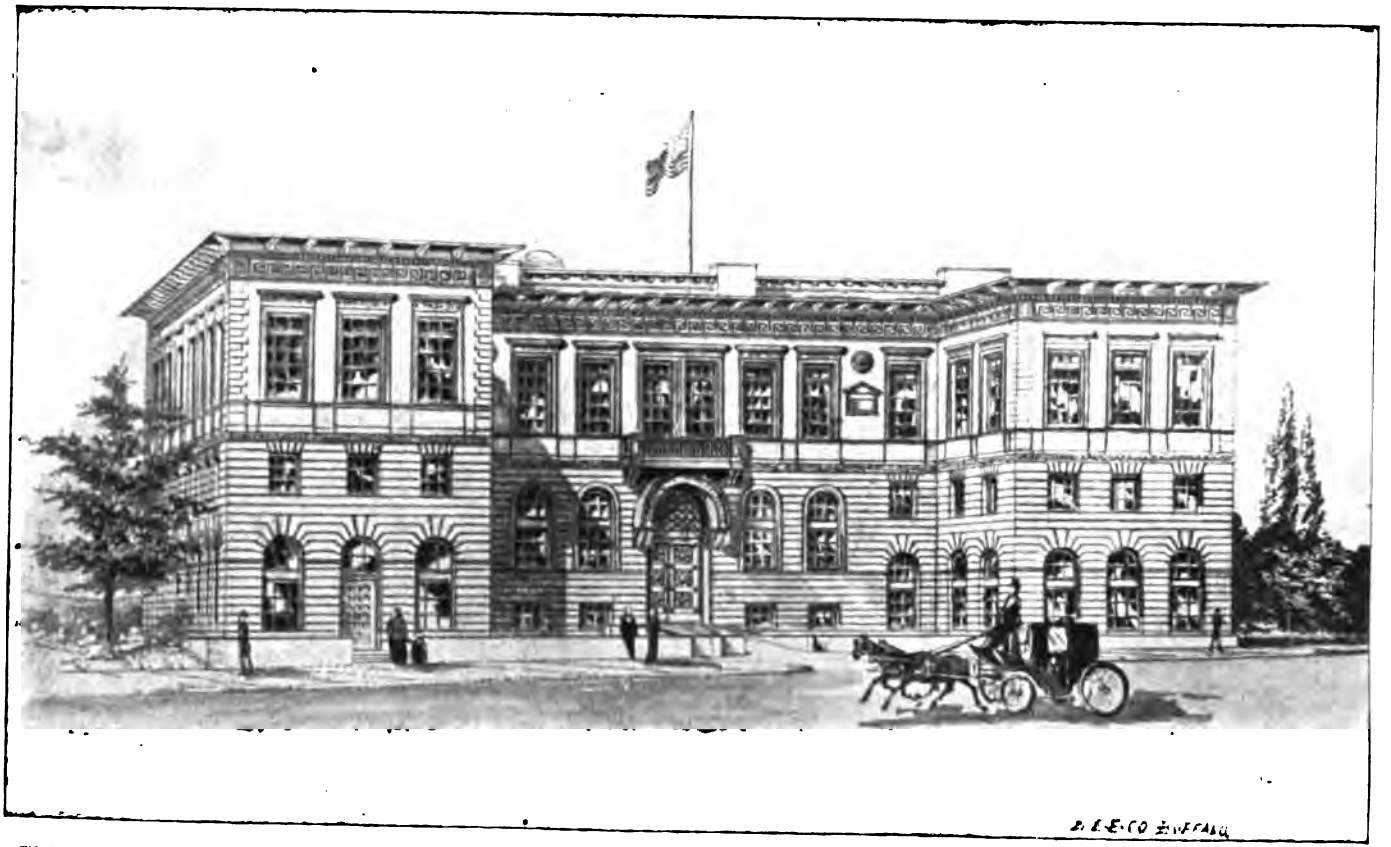
Public opinion has never been deemed a very safe agent in the administration of justice since it profaned the judgment seat and insulted heaven by the cry of Crucify Him! Crucify Him!! Pilate, weak and timeserving, disobeyed the dictates of his own conscience and followed the popular outcry, which he mistook for public opinion. But the sacred history of that awful tragedy informs us that the chief priests and elders persuaded the multitude.

Dr. Loomis was acquitted, for it was proven that another had written the libel, but Dr. White was vindicated and his name will roll down the centuries in connection with the clinical teaching of midwifery in the United States, as being the first teacher to attempt it in this country.

In 1851, Dr. John C. Dalton, who had been appointed professor of physiology to succeed Dr. Coventry, and who was himself the pupil of the great Bernard, introduced here, for the first time in any medical college in this country, the plan of illustrating his lectures by vivisections before the class. Dr. Austin Flint, editor of this journal, taught the practice of medicine from 1846 to 1853, when he was succeeded by Dr. Thomas F. Rochester, who taught in this department until his death, May 24, 1887. Dr. Sanford B. Hunt was appointed demonstrator of anatomy in 1853, succeeded to the professorship in 1854, holding until 1858, when Dr. Sanford Eastman, an alumnus of the college, was appointed. On the death of the latter Dr. Milton G. Potter, also an alumnus, became professor of anatomy and served as such until his demise, January 28, 1878.

After Dr. Hamilton removed to New York in 1860, Dr. E. M. Moore, of Rochester, N. Y., who had been teaching surgical pathology, was appointed to the chair of surgery. Professor Moore continued his labors in this field until 1883. He is still in good health, though less actively at work than formerly.

Since it is my purpose in this article to speak especially of first things, I must be brief, passing many points of importance that it would be interesting to recall. In 1871, the subject of organizing an alumni association was agitated, and many conferences were held between members of the faculty and prominent alumni. An organization was finally perfected with Dr. Thomas D. Strong, of Westfield, as the first president. The first public meeting was held February 23, 1875, when the address to the alumni was delivered



THE PRESENT (THIRD) BUFFALO MEDICAL COLLEGE, HIGH STREET—MEDICAL DEPARTMENT, UNIVERSITY OF BUFFALO.

by Dr. William Warren Potter in St. James's Hall (that stood on the site of the Iroquois Hotel) on the evening of commencement day. At the first banquet of the association, held at the Tifft House, on the same evening, Dr. T. D. Strong presided, grace was said by the Rev. G. W. Heacock, D. D., and Professor James P. White responded to the first toast, "Our Alma Mater."

While it would be interesting in this connection to mention the achievements of some of the distinguished alumni, there is now neither time nor space to do so. Yet there is one whose name and fame have become coëxtensive with the boundaries of the globe itself. Albert J. Myer graduated in the class of '51, entered the United States Army as assistant surgeon in 1854 and soon afterward was assigned to duty in Texas. While there he devised a mono-manual deaf-mute alphabet. Still later he invented and put into practical operation a system of military signals, that contributed amazingly to the success of our arms in the late unhappy war. A separate bureau was created by act of congress and Dr. Myer was placed at its head with the rank of brigadier-general. General Myer, gifted with a scientific mind associated with inventive genius, prepared a code of weather signals that has become the basis of the present system in operation throughout the world, which gained for him the familiar title of "Old Probabilities."

He died at Buffalo, August 24, 1880, and his remains rest in a beautiful mausoleum in Forest Lawn cemetery.

Epoch III.

A few years ago the college building at the corner of Main and Virginia streets became unsuited to the purposes of modern medical teaching. Its anatomical rooms were inadequate, its laboratories too restricted in area and, in short, the methods of 1890 had outgrown those of 1850. It must not be forgotten, however, that this was the first building erected in this city for collegiate instruction since the soil on which it stands was relinquished by the Senecas. It ought, therefore, in our view, to be preserved by the city as a memorial to educational advancement. It might be made a school library building or a museum of some sort, that would perpetuate the memory of the men who founded it as well as the purposes for which it was founded.

The present college building was opened March 5, 1893, with public ceremonies, an account of which appeared in the Journal,

April, 1893. It is a superb building, admirably adapted to the purposes of medical instruction, and bespeaks the energy and sagacity of its projectors. We need not extend our comments in detail during this epoch. It pertains to the immediate present, and its history is as yet unwritten. Beginning with the mention of the first faculty of seven, it is fitting that we should name the present one that is conducting the school on such prosperous lines. The successors, then, of the original seven are:

Charles Cary, M. D., professor of materia medica, therapeutics and clinical medicine; Matthew D. Mann, A. M., M. D., dean, professor of obstetrics and gynecology; Roswell Park, A. M., M. D., professor of principles and practice of surgery and clinical surgery; Julius Pohlman, M. D., professor of physiology; Charles G. Stockton, M. D., professor of principles and practice of medicine and clinical medicine; John Parmenter, M. D., secretary, professor of anatomy and adjunct professor of clinical surgery; Herbert M. Hill, A. M., Ph.D., professor of chemistry, toxicology and physics.

To these are now added seven adjunct professors, as follows: Wm. C. Phelps, M. D., associate professor and demonstrator of anatomy; De Lancey Rochester, A. M., M. D., adjunct professor of the principles and practice of medicine; P. W. Van Peyma, M. D., adjunct professor of obstetrics; Eli H. Long, M. D., adjunct professor of materia medica; Herbert U. Williams, M. D., professor of pathology; Fred. B. Willard, M. D., assistant demonstrator of anatomy; Loren H. Staples, M. D., prosector to the chair of anatomy.

The professors of special departments are: Lucien Howe, A. M., M. D., clinical professor of ophthalmology; Mahlon B. Folwell, M. D., clinical professor of diseases of children; Ansley Wilcox, A. B., LL. B., professor of medical jurisprudence; D. W. Harrington, M. D., professor of venereal diseases; Henry R. Hopkins, M. D., professor of hygiene; Bernard Bartow, M. D., clinical professor of orthopedic surgery; F. Whitehill Hinkel, M. D., clinical professor of laryngology; Ernest Wende, B. S., M. D., clinical professor of dermatology; W. E. Ford, A. M., M. D., Utica, N. Y., professor of electro-therapeutics; Jas. W. Putnam, M. D., clinical professor of diseases of the nervous system; Wm. H. Heath, M. D., clinical professor of genito-urinary and venereal diseases; William C. Barrett, M. D., D. D. S., professor of oral pathology; Floyd S. Crego, M. D., professor of insanity and diseases of the brain; Willis G. Gregory, M. D., Ph. G.,

director of the pharmacal laboratory; Francis T. Metcalfe, M. D., lecturer on comparative pathology; Franklin W. Barrows, A. B., M. D., lecturer on histology and biology; F. J. Thornbury, M. D., lecturer on bacteriology.

The instructors are: Fred B. Willard, M. D., instructor in anatomy; Allen A. Jones, M. D., instructor in medicine; A. L. Benedict, A. M., M. D., instructor in materia medica and therapeutics; M. A. Crockett, A. B., M. D., instructor in obstetrics and gynecology; Edward J. Meyer, M. D., instructor in surgery; Albert T. Lytle, M. D., instructor in chemistry; Dewitt H. Sherman, M. D., instructor in therapeutics; Ferdinand G. Moehlau, M. D., instructor in physiology; J. F. Whitwell, M. D., instructor in general pathology; H. C. Rooth, M. D., instructor in special pathology; E. L. Frost, M. D., instructor in obstetrics.

Student assistants: F. C. Busch, B. S., A. T. Kerr, B. S., assistants in pathology and in the histological laboratory.

Clinical instructors: General practice, Drs. Allen A. Jones, Geo. Himmelsbach, A. T. Lytle; surgery, Drs. Edward J. Meyer, J. Franklin Whitwell; diseases of women, Drs. M. A. Crockett, P. C. Cornell; diseases of the nervous system, Drs. James W. Putnam, F. S. Crego, James A. Gibson; diseases of children, Drs. Irving M. Snow, Maude J. Frye; diseases of the skin, Drs. Ernest Wende, Grover Wende; diseases of the nose and throat, Drs. Henry J. Mulford, Geo. F. Cott; diseases of the eye and ear, Drs. Julius Pohlman, Elmer Starr, H. Y. Grant; diseases of the genito-urinary system, Drs. Loren H. Staples, F. G. Moehlau; obstetrics, Drs. W. G. Bissell, Chas. A. Clements, Irving W. Potter, H. Mead, E. L. Frost.

This array of teachers, contrasted with the original seven, indicates the progress of medical instruction during the last fifty years. As a further evidence of progress it may be mentioned that the following departments have been erected in the University of Buffalo since the establishment of the medical department, namely—the department of pharmacy, established 1886; the department of law, established 1887; the department of dentistry, established 1892, and the school of pedagogy, established in 1895.

II.—MEDICAL DEPARTMENT, NIAGARA UNIVERSITY.

From 1847 to 1883, Buffalo University medical college occupied alone the field of medical training in this city. In the latter year, however, prompted by the desire to advance the standard of

medical education, a number of physicians petitioned the regents of the University of the State of New York for authority to establish another medical college in Buffalo. In 1863, an academic school called the Seminary of Our Lady of Angels was located near Suspension Bridge. In 1883, this seminary was erected into a university with authority to locate any of its colleges in Erie county. A department of medicine was thereupon organized by Niagara University, which was located in the City of Buffalo. Its requirements for admission were that students must pass a matric-

CHARLES C. F. GAY, M. D.

ulation examination in such branches as were considered necessary to fit them for the study of medicine. It was announced that the course of study would continue during three years, to comprise three full courses of lectures of six months each and the faculty recommended that students should extend their studies to four years. The first faculty was organized as follows: John Cronyn, M. D., professor of the principles and practice of medicine and clinical medicine, president of the faculty; Thomas Lothrop, M. D., professor of obstetrics; William H. Heath, M. D., professor

of descriptive and surgical anatomy; Augustus R. Davidson, M. D., professor of medical chemistry, pharmacy and toxicology; Henry D. Ingraham, M. D., professor of gynecology and diseases of children; Charles G. Stockton, M. D., professor of materia medica and therapeutics; Charles C. F. Gay, M. D., professor of operative and clinical surgery; William S. Tremaine, M. D., professor of the principles and practice of surgery and clinical surgery; Clayton M. Daniels, M. D., professor of clinical surgery and adjunct professor of surgery; George E. Fell, M. D., professor of physiology and microscopy; Alvin A. Hubbell, M. D., professor of ophthalmology, otology and laryngology; Hon. Joseph M. Congdon, professor of jurisprudence. The right reverend Stephen V. Ryan, D. D., was announced as chancellor of the University and John L. C. Cronyn, M. D., as demonstrator of anatomy. Of these Drs. John Cronyn, Lothrop, Ingraham and Hubbell still remain in their original places; Drs. Davidson and Gay are dead; Drs. Stockton and Heath are teaching in Buffalo University and Drs. Tremaine, Daniels, Fell, John L. C. Cronyn and Hon. Joseph M. Congdon have resigned. Dr. Gay was distinguished as a surgeon, having served on the staff of both hospitals, and was an eminent citizen. His death occurred March 27, 1886.

The first lectures of the college were delivered at the Buffalo Hospital of the Sisters of Charity and later the Young Men's Christian Association building was utilized for that purpose. In 1884, the present college building located on Ellicott street, between Broadway and Clinton, was constructed and made ready for occupation about January 1, 1885. In 1891, this building was enlarged to its present proportions to meet the increasing demand for enlarged laboratories and ampler lecture rooms. An alumni association was organized in 1886, consisting of the faculty and lecturers of the college together with the graduates of that year. The officers were as follows: President, Dr. William H. Heath; first vice-president, Dr. R. B. Parks, Jamestown; second vice-president, Dr. E. J. Murphy, Buffalo; secretary, Dr. Geo. W. T. Lewis, Buffalo; treasurer, Dr. Simeon T. Clark, Lockport; executive committee, Drs. F. S. Crego, S. T. Clark and Anthony Hill, Buffalo.

The first commencement exercises of the college were held at Association Hall on the evening of April 12, 1886. The degree of doctor of medicine was conferred upon the following named candidates: E. J. Murphy, Buffalo; R. B. Parks, Jamestown; Thomas

Hill, Buffalo; George Wetherell, Toronto, and George W. T. Lewis, Buffalo; Anthony Hill, Buffalo.

The manner of conferring degrees at this institution is by "hooding," in pursuance of an ancient rite observed in many of

MEDICAL DEPARTMENT—NIAGARA UNIVERSITY.

the English universities. It is conducted as follows: The candidates, wearing their long black gowns, are introduced by a graduate to the chancellor of the university, with the following words:

Insignissime Cancellarie: Presento tibi huncce scholarum in facultate medicinæ ut admittatur in gradum doctoris medicina testorque eum quoad omnia quae statuta requirunt aptum et idoneum esse.

Each candidate then kneels before the chancellor, who holds the candidate's hands in his and, while the candidate is "hooded" by another graduate, who acts as a beadle, pronounces the following formula:

Ad profectum reipublicae ego, auctoritate mea et totius universitatis admitto te ad gradum doctoris in medicina licentiamque tibi do omnia ea facienda quae ad illum gradum pertinent.

The first address to the graduates was delivered by Dr. Simeon T. Clark, of Lockport, now deceased, professor of medical jurisprudence, who had been appointed to that chair, vice Hon. Joseph M. Congdon resigned. Dr. Clark, a gifted and versatile man, was seized of apoplexy while in the performance of his busy professional duties and died in the midst of a useful life, December 24, 1891.

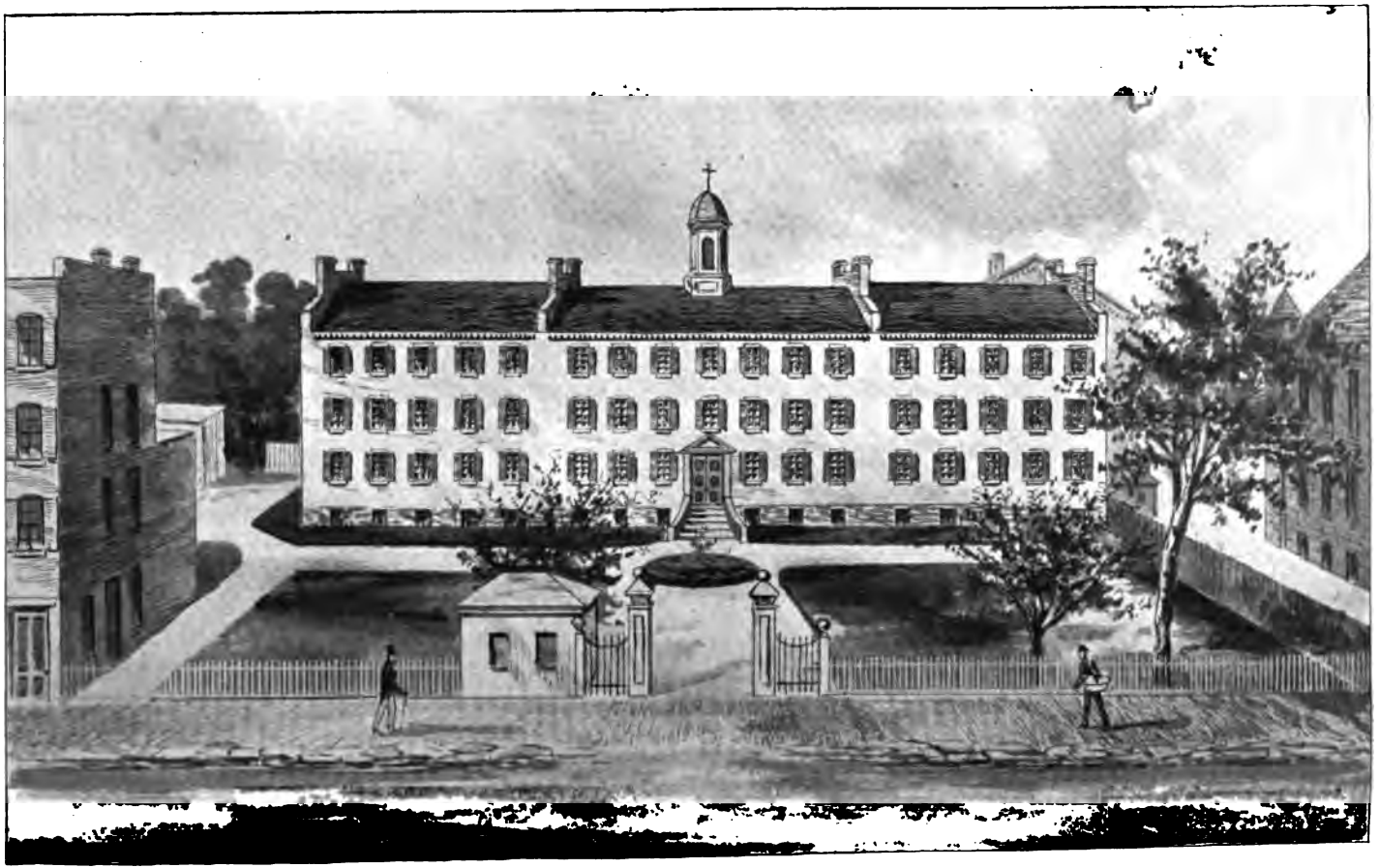
The first public meeting of the Alumni Association was held April 12, 1887, at which Dr. William H. Heath presided. Papers were read at this meeting by Drs. Stephen Smith, of New York, and B. H. Daggett, Henry D. Ingraham and Frank Hamilton Potter, of Buffalo. The first public banquet which followed was served at the Genesee, at which seventy guests participated, including the faculty, alumni and invited guests.

The officers for 1895–'96 are: President, Joseph J. Kane, A. M., M. D.; first vice-president, Bentley S. Bourne, M. D.; second vice-president, Daniel F. White, M. D.; secretary, Henry Osthues, M. D.; permanent secretary, John J. Twohey, M. D.; treasurer, Frederick M. Boyle, M. D.; executive committee, James J. Mooney, M. D., Frederick A. Hayes, M. D., Joseph J. Finerty, M. D., all of Buffalo, N. Y. The association holds its annual meetings at the college hall on the commencement day of the medical school.

When this college was organised, two years' study in medicine was the legal requirement, but Niagara University, from the outset, insisted upon three years, while it recommended a four years' course. From the start it took a high stand and has been prosperously conducted by its able projectors since it was founded.

A law took effect September 1, 1891, establishing three years as the minimum course of medical study in the State of New York and establishing a separate state examining and licensing board, so that now all the medical colleges of the state are compelled by law to have the same minimum requirements for graduation.

The present faculty of Niagara University is constituted as follows: John Cronyn, M. D., Ph. D. LL. D., professor of principles and practice of medicine and clinical medicine, president of



BUFFALO HOSPITAL OF THE SISTERS OF CHARITY—1848–1876.

the faculty; Thomas Lothrop, M. D., Ph. D., professor of obstetrics, vice-president and treasurer of the faculty; Alvin Allace Hubbell, M. D., Ph. D., professor of ophthalmology and otology, secretary of the faculty; Henry D. Ingraham, M. D., professor of gynecology and pediatrics; William H. Pitt, M. D., Ph. D., professor of general chemistry and physics; Herman Mynter, M. D., professor of operative and clinical surgery; Herbert Mickle, M. D., professor of principles and practice of surgery; Carlton C. Frederick, M. D., adjunct professor of obstetrics; John A. Miller, M. Sc., A. M., Ph. D., professor of medical chemistry and toxicology; John D. Flagg, M. D., professor of physiology and microscopy; Eugene A. Smith, M. D., professor of general, descriptive and surgical anatomy; Henry C. Buswell, M. D., adjunct professor of principles and practice of medicine; William C. Krauss, M. D., professor of nervous diseases; L. Bradley Dorr, M. D., professor of bacteriology; W. Scott Renner, M. D., professor of laryngology; Walter D. Greene, M. D., professor of hygiene; Rollin L. Banta, M. D., professor of materia medica and therapeutics; Harry A. Wood, M. D., professor of insanity and adjunct professor of materia medica; Harlow C. Curtiss, A. M., professor of medical jurisprudence; Sidney A. Dunham, M. D., lecturer on physiology; Edward M. Dooley, M. D., adjunct professor of anatomy; Frederick A. Hayes, M. D., demonstrator of anatomy; Frederick Preiss, M. D., assistant in the principles and practice of surgery; David L. Redmond, M. D., lecturer on dermatology; Earl P. Lothrop, M. D., lecturer on pathology and clinical assistant in obstetrics; Alfred E. Diehl, M. D., lecturer on histology; George Roberts, M. D., lecturer on chemistry and demonstrator in pathology and bacteriology; Robert A. Poynton, M. D., lecturer on anatomy; Henry Osthues, M. D., Max Keiser, M. D., assistant demonstrators of anatomy.

Clinical assistants: Surgery—Frederick A. Hayes, M. D., Frederick Preiss, M. D., Henry Osthues, M. D. Medicine—R. L. Lounsberry, M. D., Alois Jokl, M. D., Max Keiser, M. D. Diseases of women, eye, ear and throat—John H. Daniels, M. D.

In concluding this sketch of the medical colleges, the suggestion is offered that, in view of the fact that the American Association of Medical Colleges has adopted a four years' course of study as a minimum requirement, and further, in view of the strong probability that soon a state law will be enacted on the subject, now is an appropriate time for Buffalo medical institutions to raise their curricula to four years' graded courses of collegiate study.

BUFFALO HOSPITAL OF THE SISTERS OF CHARITY — 1895.

III.—Hospitals.

I.—Buffalo Hospital of the Sisters of Charity.

Although the subject had been many times agitated, it was not until 1848 that a hospital was really opened for the reception of patients in the city of Buffalo. A building located on what is now known as Pearl Place, made up of a group of several contiguous dwelling houses that had been previously occupied as an orphan asylum, was converted into a hospital and placed under the management of the Sisters of Charity. This building is now occupied as a tenement. It was incorporated under the laws of the State of New York and accommodations were provided for 100 patients. Later an appropriation of $9,000 was made by the state. It was in readiness by August, 1848, and during the first six months 121 patients were received. It was provided that no questions should be asked of the patients when admitted touching matters of religion, and that applications for admission should be made to the medical board, to the president of the Good Samaritan Society, or of the Society of St. Vincent of Paul and, further, that a line from the pastor of any church of any denomination should also secure admission. The following was the schedule of weekly prices:

1. For the sick-poor in the general ward to include board, washing, medical attendance, nursing and medicine, $1.50.
2. For those in the marine ward the rate fixed by government.
3. For the sick who can pay for board, medicine, attendance, washing, and the like in a general ward, $2.50.
4. For the sick who are able to pay and who desire private rooms, $4.

The first medical board was constituted as follows: Frank H. Hamilton, M. D., attending surgeon; Austin Flint, M. D., attending physician; James P. White, M. D., consulting surgeon; Josiah Trowbridge, M. D., consulting physician.

Appreciating the importance of clinical instruction, the late Bishop Timon, a learned prelate of the Roman Catholic Church, threw open the doors of the hospital for that purpose, where, for a small fee, the students of the medical college, then lately established, received bedside training under the supervision of an attending physician or surgeon.

During the cholera epidemic of 1849 there were admitted into this institution previous to September 1st, 136 patients suffering with this disease, fifty-two of whom died. This evidently was a

busy year for the hospital, as the report for that year, made November 27th, shows that 1,513 patients in all were admitted, of whom more than one-half were charity cases. The records of the first fourteen years were destroyed by fire, so it is impossible to trace its interesting history during that period.

From time to time the capacity of the hospital was increased, so that finally it could accommodate nearly 200 patients. It, however, soon outgrew its first location and in 1872 a site was purchased on North Main street, corner of Delavan avenue, for a new and larger hospital building. In June, 1875, ground was broken, in August the corner-stone was laid and on November 5, 1876, the hospital was dedicated. The cost of the buildings and ground was $168,368.

This is a large, substantial, four-story brick structure with basement situated upon high ground surrounded by beautiful broad lawns. When the new wing now building is completed the hospital will be as represented in the illustration given on page 93. It is a modern building with all the conveniences necessary for its numerous patients, and when finished it will have its own electric plant for lighting, and it will be heated and ventilated according to the latest and best methods. One of the best arranged and most complete surgical operating rooms in the state is in this hospital. The new gynecological operating room will be equally as complete as the surgical. The cost of the building when completed will be about $250,000 and its capacity will be 344 beds. In addition a contagious pavilion, containing from twenty-five to thirty beds, will be erected during the present summer.

This was one of the first hospitals in the United States under the management of the Sisters of Charity to establish the custom of resident physicians, and it was the first one under the Sisters' management to establish a training school for nurses.

The present medical staff is composed of the several professors of Niagara University who have charge in their respective branches.

II.—BUFFALO GENERAL HOSPITAL.

Meetings of several citizens were held at the office of Henry W. Rogers, collector of the port of Buffalo, on the 23d and 26th of October, 1846, at which an association was formed for the establishment of a public hospital in this city. Thirty-five directors were appointed and officers were elected as follows: President, Josiah Trowbridge, M. D.; first vice-president, Gen. H. B. Potter;

second vice-president, Geo. W. Clinton; secretary, E. S. Baldwin; treasurer, S. N. Callender; executive committee, R. H. Heywood, Bryant Burwell, M. D., and George Jones. Dr. F. H. Hamilton was appointed attending surgeon, and Dr. Austin Flint, attending physician, with Drs. Trowbridge and Burwell respectively as consulting physician and surgeon.

It was subsequently announced that a building known as the Seamen's Home had been obtained temporarily, to be used as a city hospital. This organization seems to have disappeared.

BUFFALO GENERAL HOSPITAL—1858.

Opposition was met with and an appropriation which was nearly obtained from the state was lost. The necessity for a hospital was great, but the next year the Buffalo Hospital of the Sisters of Charity went into operation, which met the existing emergency. The rapid growth of the city, however, soon made another hospital necessary; hence, in 1854, a second attempt was made with Millard Fillmore at the head of the board of trustees, which consisted of fifty members. It was thought unadvisable to commence operations without a capital of $100,000, but as the money could not be raised, this project, too, was abandoned. Finally, a board of nine trustees was appointed, consisting of Charles E. Clark, president; Andrew J. Rich, vice-president; William T. Wardwell, secretary and treasurer, and George S. Hazard, Bronson C. Rumsey, Roswell

L. Burrows, Stephen C. Howell and Henry Martin. On the 21st of November, 1855, the association was formed and the certificate thereof was filed in the county clerk's office, December 13, 1855. The sum of $20,000 was subscribed by citizens and in 1857 the hospital received an appropriation from the state of $10,000. A building was erected on High street on a site which was considered

BUFFALO GENERAL HOSPITAL AS ENLARGED, 1880.

one of the finest in the city, having 361 feet front on High, 450 feet on Goodrich street and a depth of 282 feet. The west wing of the building was rapidly pushed to completion and was dedicated June 26, 1858, with appropriate ceremonies amidst an enthusiastic gathering of citizens. An address was delivered by the Hon. James O. Putnam, which closed with the following outburst of lofty eloquence:

Citizens of Buffalo—The offering we this day dedicate is yours, to

cherish and to place upon an enduring basis. It is one of the noblest that can be brought into the temple of humanity. That temple is wide as the heavens and receives within its portals every child of affliction and sorrow. That charity which came to earth an angel, attendant upon the Babe of Bethlehem, knows no distinction of caste, complexion or nationality. She asks not at what altar the sufferer worships, and before she relieves, does not stop to inquire whether he even be a worshiper at all. And if she chance to find him without a faith and without a God, poor in soul as he is wretched in body, she delights, so far as comports with delicacy and propriety, in the double office of ministering to his temporal necessities, while with gentle guidance she points the wanderer 'to brighter worlds and leads the way.' I seem to hear a voice coming up through the vale of the centuries, clear and resonant, 'go and do thou likewise.'

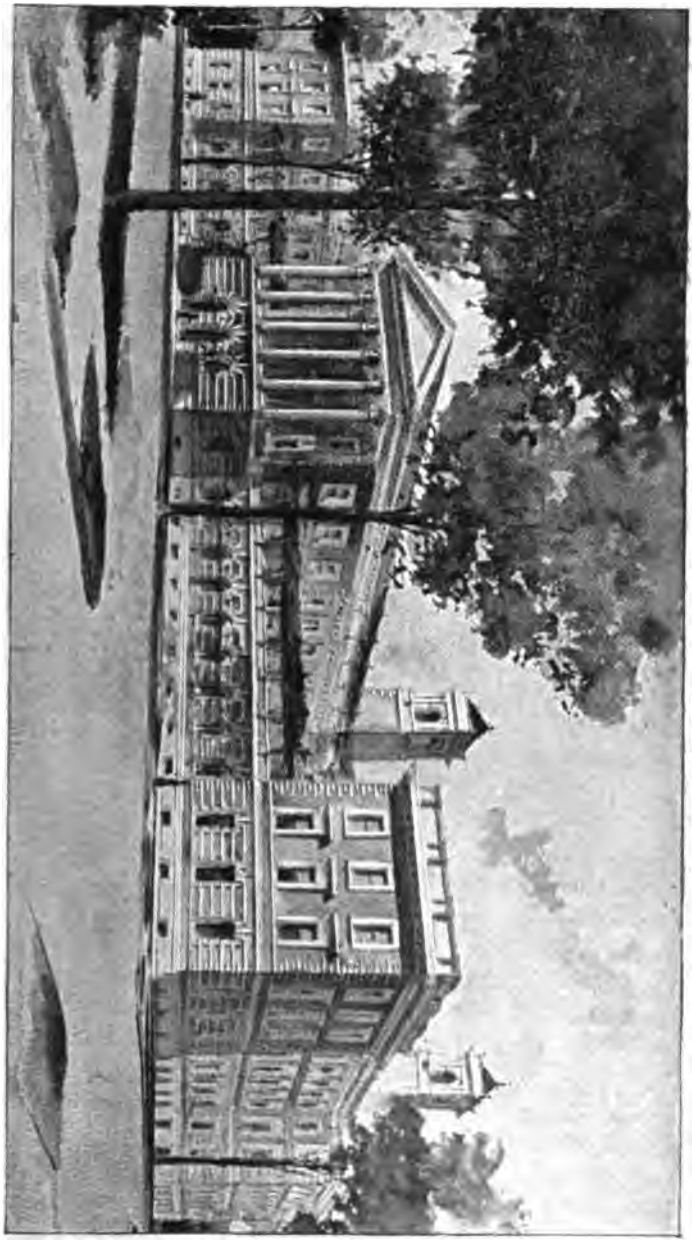
Thus the third attempt to establish a general hospital proved successful.

The following-named physicians were appointed medical officers for one year dating from July 1, 1858: Attending physicians, Drs. James M. Newman, Thomas F. Rochester and C. C. Wyckoff; consulting physicians, Drs. James P. White, George N. Burwell and P. H. Strong; attending surgeons, Drs. Charles H. Wilcox, Sanford Eastman and Austin Flint, Jr.; consulting surgeons, Drs. Frank H. Hamilton, C. C. F. Gay and John Root. Dr. Walter B. Coventry was the first resident physician.

A new wing was afterward erected that was dedicated October 1, 1880, bringing the present capacity of the hospital up to 150 beds. A training school for nurses was instituted about this time that has been in successful operation ever since. A nurses' home has been built on the hospital grounds.

The demands of a largely increased growth of the city are such as to overflow the accommodations of all our charities. A further enlargement of the hospital is, therefore, contemplated on lines that are already drawn by the architect, an allusion to which was made in the April, 1895, issue of the JOURNAL, page 554. The munificent gift of $55,000 made by Mrs. George B. Gates and her three daughters, Mrs. William Hamlin, Mrs. Charles W. Pardee and Miss Elizabeth Gates, renders it possible to begin this work at once. When completed it will be one of the most substantial and beautiful hospital structures in the country.

The hospital staff is at present constituted as follows: Consulting physicians, Cornelius C. Wyckoff, M. D., Conrad Diehl, M. D., M. B. Folwell, M. D.; consulting surgeons,



PROPOSED BUFFALO GENERAL HOSPITAL.

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John Hauenstein, M. D., Devillo W. Harrington, M. D.; consulting obstetrician, Matthew D. Mann, M. D.; consulting neurologist, James W. Putnam, M. D.; consulting aural surgeon, William C. Barrett, M. D.; consulting dermatologist, Ernest Wende, M. D.; attending physicians, Charles Cary, M. D., Henry R. Hopkins, M. D., Charles G. Stockton, M. D.

Attending surgeons, Roswell Park, M. D., and William C. Phelps, M. D.; gynecologist, Matthew D. Mann, M. D.; obstetrician, P. W. Van Peyma, M. D.; pathologist, Herbert U. Williams, M. D.; ophthalmic and aural surgeons, Frank W. Abbott, M. D., and Lucien Howe, M. D.

Assistants to medical staff: DeLancey Rochester, M. D., assistant physician; M. A. Crockett, M. D., assistant gynecologist; John Parmenter, M. D., assistant surgeon.

Resident staff: Edward F. Horr, M. D., Sidney D. Wilgus, M. D., P. R. Outlaw, M. D., Grant Cooper, M. D., Kate Isabel Kennedy, superintendent of nurses.

III.—BUFFALO STATE HOSPITAL.

The corner-stone of this institution was laid September 18, 1872, with masonic ceremonies in the presence of a large number of citizens. Governor John T. Hoffman pronounced an address, Dr. James P. White, president of the board of managers, made some introductory remarks and the Hon. James O. Putnam delivered a formal address. The commissioners designated to locate the hospital in Western New York were appointed in 1869 by Gov. Hoffman, namely—Dr. John P. Gray, Utica; Dr. James P. White, Buffalo; Dr. Thomas D. Strong, Westfield; Dr. William B. Gould, Lockport, and Dr. Milan Baker, Warsaw. The first board of managers was as follows: Dr. John P. Gray, Utica; Asher P. Nichols, Buffalo; Dr. William B. Gould, Lockport; Lorenzo Morris, Fredonia; Augustus Frank, Warsaw; Albert P. Laning, William G. Fargo, George R. Yaw, Dr. James P. White and Joseph Warren, Buffalo. It is appropriate to state that it was chiefly due to the efforts of Dr. White that the hospital was located in Buffalo. The erection of the administration building and the east wing was proceeded with at once. It was not, however, until 1880 that it was made ready for the reception of patients. Dr. Judson B. Andrews, of Utica, was appointed superintendent, and under his able management the hospital soon assumed a leading position among institutions for the care of the insane in this country.

The work on the west wing was begun in 1889 and the first building was completed in 1891. The second building was completed in 1895 and the three remaining buildings are now in pro-

JUDSON BOARDMAN ANDREWS, M. D.

cess of erection, which will make the westerly wing symmetrical with that of the easterly side of the center building.

A training school for nurses was established about ten years ago, this being the first public institution for the treatment of the

insane to establish such a school in this country. The school has over 100 graduates, many of whom are doing private nursing successfully in this city and sections of the state. The hospital also has a nurses' home situated upon the grounds.

There is in contemplation the erection of an infirmary building for acute cases, which will be complete in every respect with laboratories, operating rooms and isolated wards for the acutely sick. The institution now has a population of 841, and when the new buildings are completed the capacity of the hospital will be about 1,200. The cost of the building, when the present wing is completed, will be approximately $2,000,000.

The following-named gentlemen compose the present board of managers: Dr. John Cronyn, president, Hon. Daniel H. McMillan, Charlotte S. Williams, Alphonse J. Roehner, Dr. Thomas Lothrop, Joseph P. Dudley, Charlotte T. M. Glenny, Dr. Roswell Park, Buffalo; Hon. John E. Pound, Lockport; Frederick P. Hall, Jamestown.

The following-named are the present medical officers: Dr. Arthur W. Hurd, superintendent, Drs. Percy Bryant, Herman G. Matzinger, George G. Armstrong, Walter H. Conley, Helene Kuhlmann and Walter H. Kidder, assistant physicians.

IV.—PROVIDENCE RETREAT.

The Providence Retreat is a private institution for the care and treatment of the insane, conducted by the Sisters of Charity. It was opened July 15, 1861, and now has a capacity for 175 patients. Dr. William Ring was the first attending physician, and the physicians now in charge are Drs. Floyd S. Crego and Harry A. Wood. The consulting physicians are Drs. John Cronyn, Conrad Diehl, Thomas Lothrop, E. C. W. O'Brien, J. W. Putnam and Ernest Wende; consulting surgeon, Dr. Herman Mynter; consulting gynecologist, Dr. Henry D. Ingraham; consulting oculist, Dr. A. A. Hubbell.

V.—ERIE COUNTY HOSPITAL.

The law regarding the state care of the insane that took effect in 1893 left vacant the commodious and substantial structure that had been used by the county as an insane hospital. Recognising the desirability as well as economy of using this building as a hospital for the county sick, a number of physicians, under the leadership of Dr. John H. Pryor, brought this subject to the notice of

BUFFALO STATE HOSPITAL.

the board of supervisors, when, finally, the Erie county hospital was created and a visiting and consulting staff appointed. It was organised about January 1, 1894, and is situated on North Main street near the city line. The capacity of the hospital at present is 360 beds, the average population being 325 patients, but as many as 388 have been accommodated at one time.

A new consumption hospital annex with a capacity for eighty patients is in course of construction. This building is separated from the main structure, and the theory that consumption is an infectious disease pervades the entire principles of its erection.

The medical staff itself proposes to supply the consumption annex with all comforts, including billiard tables and other means of entertainment, and it is believed that this will be the first consumption hospital built in the state.

The Erie County Hospital has a training school of thirty-two nurses under the management of Miss Sarah Bond Lowe, who is assisted by five graduated nurses, each ward being placed under the supervision of a trained nurse.

The hospital staff is made up as follows: Consulting physicians, Drs. Thos. Lothrop, Chas. G. Stockton, N. Osborne; consulting surgeons, Drs. Roswell Park, Herman Mynter, Claudius Niemand; attending physicians, Drs. Jno. H. Pryor, DeLancey Rochester; attending surgeons, Drs. W. S. Tremaine, John Parmenter, Eugene Smith, Dewitt G. Wilcox; gynecologists, Drs. Herman E. Hayd, Stephen Y. Howell, Carlton C. Frederick, George T. Mosely; obstetricians, Drs. P. W. Van Peyma, Rollin L. Banta; diseases of eye and ear, Drs. A. A. Hubbell, Elmer E. Starr, F. Park Lewis; diseases of nose and throat, Dr. W. Scott Renner; genito-urinary surgery, Dr. William H. Heath; diseases of skin, Dr. Grover W. Wende; orthopedic surgery, Dr. Bernard Bartow; diseases of nervous system, Drs. Wm. C. Krauss, James W. Putnam; diseases of rectum, Dr. Edward Clark; pathology, Drs. Herbert U. Williams, Francis T. Metcalfe. Officers of the medical staff, Dr. John H. Pryor, president; Dr. Francis T. Metcalfe, secretary; executive committee, Drs. John H. Pryor, F. Park Lewis, W. S. Tremaine, P. W. Van Peyma, Edward Clark, H. E. Hayd, F. T. Metcalfe. House staff, Dr. E. J. Gilray, medical superintendent; resident physicians, Drs. Chas. Helvie, H. L. Bender, L. B. Lockard, Geo. Mord, Wm. House, Marshall Clinton, J. H. Robinson; superintendent of nurses, Miss Sarah Bond Lowe.

VI.—BUFFALO WOMAN'S HOSPITAL.

This hospital was established by Dr. Thomas Lothrop in May, 1886, to receive and care for women, married or single, during childbirth or while suffering from diseases peculiar to their sex. At first it was located on the corner of Seventh and Maryland streets, but in May, 1891, it was removed to its present situation, 191 Georgia street, corner Seventh, where it occupies a large and well-appointed

BUFFALO WOMAN'S HOSPITAL.

building. It receives a limited number of worthy indigent women suffering from curable disease, free of expense, provided that they are unable to pay for their board and treatment. There is also a free dispensary maintained in connection with the hospital. The private rooms are suitably furnished and supplied with all comforts consistent with the necessities of modern surgical cleanliness. It is in this hospital that the pupils of Niagara University receive such admirable obstetric training. Under the supervision of Pro-

fessor Lothrop each member of the senior class is enabled to attend from three to six cases of labor before graduation. Dr. Thomas Lothrop is the physician-in-chief and Dr. C. C. Frederick is the surgeon-in-chief. Drs. Jacob H. Meyer, William G. Taylor and Earl P. Lothrop are clinical assistants.

The following-named gentlemen compose the consulting staff: Drs. W. S. Tremaine, Herman Mynter, Rollin L. Banta, Henry C. Buswell, Wm. Warren Potter, Herbert Mickle, Eugene A. Smith, Walter D. Green.

VII.—ST. MARY'S ASYLUM FOR WIDOWS, FOUNDLINGS AND INFANTS.

This institution is located at 126 Edward street, and is under the charge of ten Sisters of Charity. It was opened June 1, 1854, with accommodations in two cottages for fifteen inmates; Dr. James P. White was the attending physician, and Sister Rosalie, with two other sisters, was in charge. It has at present accommodations for about 185 persons. After Dr. White's term of service expired Dr. James S. Smith took charge, and he was followed by Dr. Eugene A. Smith. Dr. Thomas Lothrop and Dr. C. C. Frederick are now in charge of the lying-in wards, and Dr. Earl P. Lothrop is clinical assistant. The present attending physician is Dr. Eugene A. Smith, who is assisted by Drs. Henry Osthues and B. H. Brady.

VIII.—ST. FRANCIS ASYLUM.

This institution, located at 337 Pine street, was established December 18, 1861. The founder, Mother M. Francis Bachman, with three sisters of the Franciscan order, came from Philadelphia, where they had established a similar asylum. It has for its object the care of aged poor of both sexes, regardless of nationality or religious denomination. The average number of inmates, from 1863 to 1867, was nineteen; during the past ten years the average was 245. At present there are 300 inmates in the institution. The number of sisters in attendance is thirty-two. The total number of Franciscan sisters is 170, who are engaged in the various institutions of the order located in different cities.

Formerly Drs. Edward Storck and Conrad Diehl were attending physicians. Now Drs. Thomas Lothrop, John D. Flagg, William C. Krauss and A. E. Persons compose the attending staff.

ERIE COUNTY HOSPITAL.

IX.—BUFFALO CHILDREN'S HOSPITAL.

This institution was established in September, 1892, through the generosity of Mrs. Gibson T. Williams and Miss Martha Williams, who purchased the property, 219 Bryant street, and after refitting it offered it rent free to the board of managers, which is composed of a group of philanthropic women. The hospital now has accommodations for thirty-six patients.

The following is the present list of officers: Mrs. Lester Wheeler, president; Mrs. George H. Lewis, vice-president; Mrs. Henry Watson, Mrs. Bainbridge Folwell, purveyors; Miss Martha T. Williams, treasurer; Mrs. Bernard Bartow, secretary.

Executive committee: Mistresses E. B. Alward, George Truscott, S. S. Spaulding, Wm. Hamlin, Henry Bull, T. T. Ramsdell, Nathaniel Rochester, Dexter P. Rumsey, George Parkhurst, Edwin Bell, E. P. Fish, Chas. Pardee, John L. Williams, Joseph Hunsicker.

Advisory committee: Messrs. George H. Lewis, Sherman S. Rogers, G. L. Williams, C. Sidney Shepard, Henry W. Sprague.

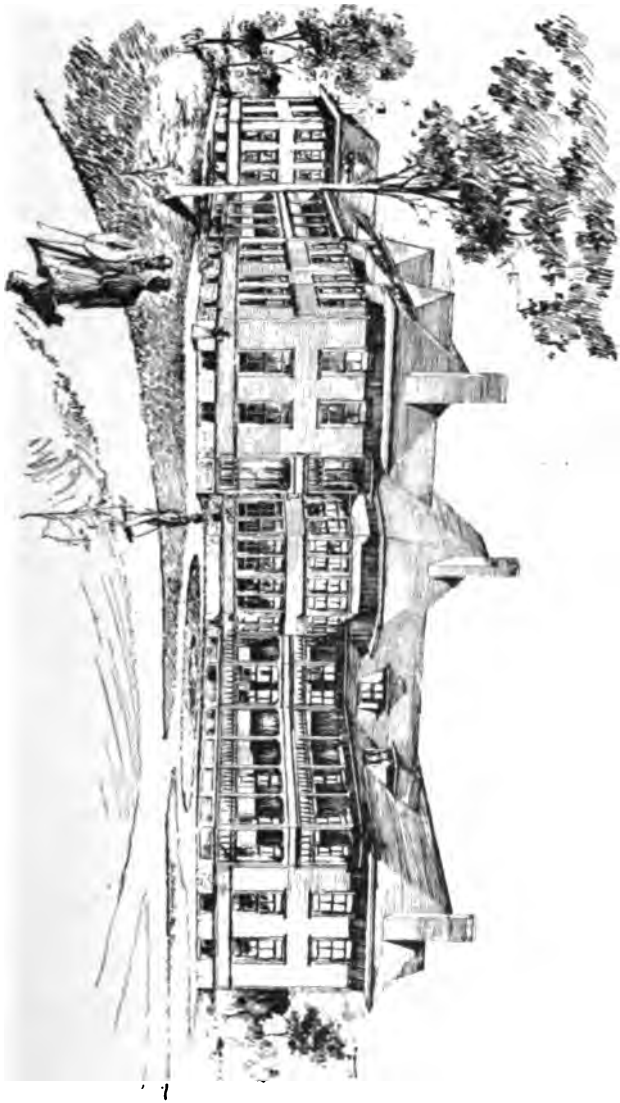
The medical staff is as follows: Attending physician, Dr. Bainbridge Folwell; attending surgeon, Dr. John Parmenter; orthopedic surgeon, Dr. Bernard Bartow; assistant physician, Dr. Dewitt H. Sherman; assistant surgeon, Dr. Loren H. Staples; neurologist, Dr. Chas. S. Jones; ophthalmic and aural surgeon, Dr. H. Y. Grant, and nose and throat surgeon, Dr. W. Scott Renner.

X.—BUFFALO HOMEOPATHIC HOSPITAL.

The Buffalo Homeopathic Hospital was organised June 14, 1872, and is located at 74 Cottage street, corner Maryland. We are unable to give the names of the first medical staff, but the board of trustees for the first year was made up as follows: * Jerome Pierce, * Chas. C. McDonald, * Benj. H. Austin, Sr., Loran L. Lewis, * Jas. Brayley, * Francis H. Root, * Jerome F. Fargo, * John B. Griffin, Samuel V. Parsons, * Mrs. C. C. Warner, * Mrs. M. A. Kenyon, * Mrs. Hannah Fargo, Mrs. Anna Poole Hoxsie, Mrs. Hattie E. Gregg, Mrs. Charlotte E. Lewis. The capacity of the hospital is about sixty patients.

The medical and surgical staff now in service is as follows: President, Dr. A. M. Curtiss; first vice-president, Dr. Henry Baethig; second vice-president, Dr. H. A. Foster; secretary, Dr. Geo. T. Moseley.

* Deceased.



CONSUMPTION ANNEX—ERIE COUNTY HOSPITAL.

Consulting physicians: Drs. A. R. Wright, A. T. Bull, H. A. Foster, D. B. Stumpf, H. Baethig, N. Osborne, A. M. Curtiss, John Miller.

Attending physicians: Drs. E. P. Hussey, B. J. Maycock, E. A. Fisher, J. T. Cook, T. J. Martin, C. S. Albertson.

Attending surgeons: Drs. H. C. Frost, D. G. Wilcox, G. T. Moseley; obstetricians, Drs. J. S. Halbert, G. R. Stearns; ophthalmic surgeon, Dr. F. Park Lewis; pathologist, Dr. A. W. Dods; pharmacist, Dr. P. A. McCrea.

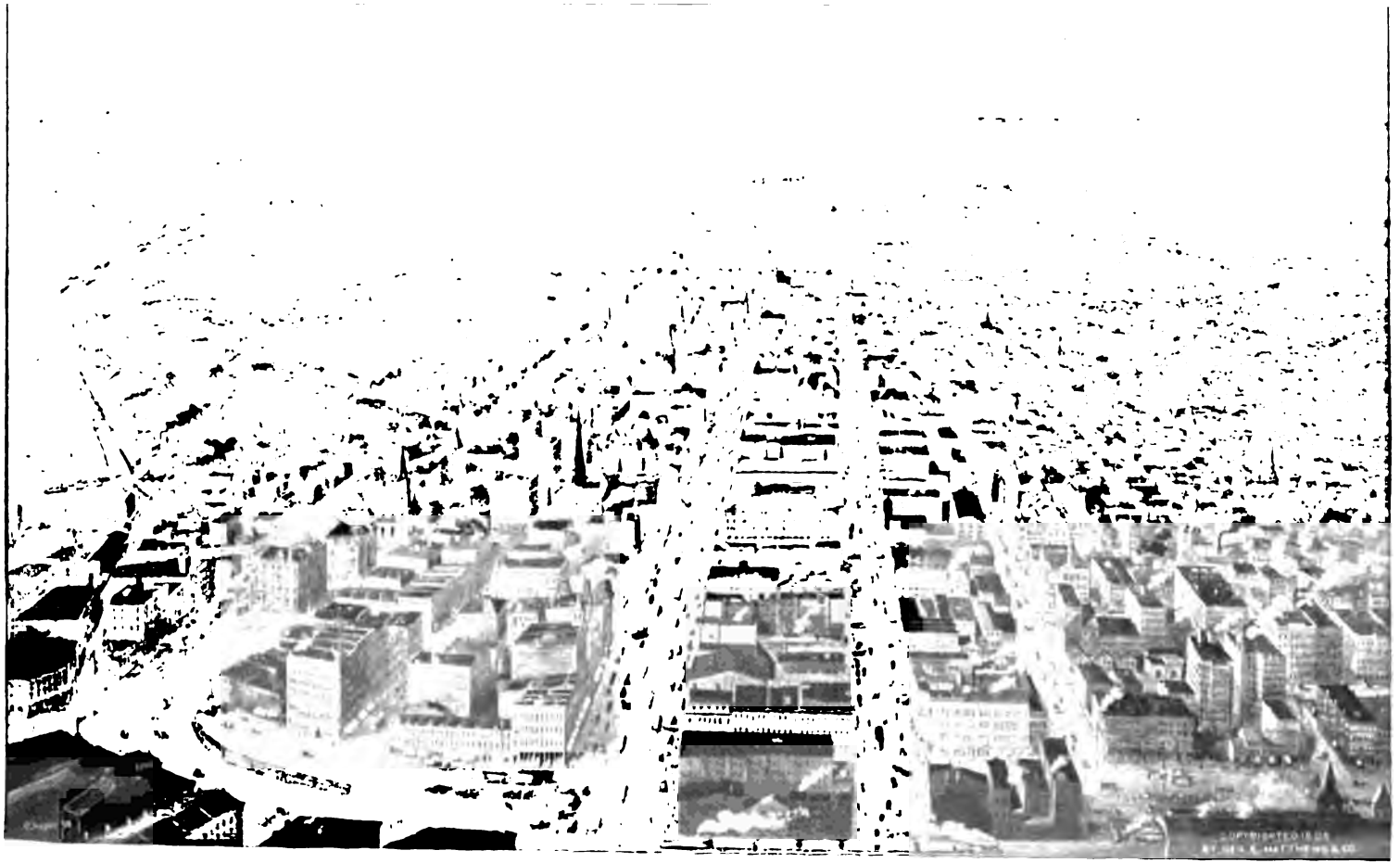
Junior staff physicians: Drs. A. B. Eadie, E. Bodenbender, N. Bodenbender, D. Schladermundt, P. L. Carter.

Junior staff surgeons: Drs. M. F. Linquist, M. Manges, W. H. Marcy, H. L. Towner; ophthalmologists, Drs. W. A. M. Hadley, F. D. Lewis; obstetricians, Drs. Jessie Shepard, Rose Wilder; laryngologist, Dr. F. L. Barnum.

XI.—LEXINGTON HEIGHTS HOSPITAL.

This is a private hospital under homeopathic management. It was established May, 1890, as the Wilcox Private Hospital, under which name it was conducted for two years. A stock company was then formed, called the Wilcox Hospital Company, which continued in control for one year. It was converted into the Buffalo Hospital Company in 1893, since which time it has been conducted under the name of the Lexington Heights Hospital. It receives obstetrical, surgical and general patients. Dr. Dewitt G. Wilcox is the president of the company as well as the surgeon in charge. Associated with him as a medical staff are the following-named gentlemen, who attend patients in their respective branches: George T. Moseley, M. D., gynecologist; Charles S. Albertson, M. D., obstetrician; Philip A. McCrea, M. D., skin diseases; Monroe Manges, M. D., assistant surgeon; Nehemiah Osborne, M. D., diseases of kidneys; Burt J. Maycock, M. D., heart and lungs; William C. Krauss, M. D., neurologist; H. L. Towner, M. D., orificial surgeon; S. A. Dunham, M. D., alcoholism and dipsomania; P. Livingston Carter, M. D., diseases of the stomach; A. B. Eadie; M. D., diseases of children; Wm. A. M. Hadley, M. D., oculist and aurist; Fred D. Lewis, M. D., laryngologist; Nelson Bodenbender, M. D., Edward Bodenbender, M. D., Chas. A. Schladermundt, M. D.; J. Jay Cook, dentist.

Besides these there is an emergency hospital, located on the corner of South Division and Michigan streets, which is an annex



VIEW OF BUFFALO IN 1895.

From the original engraving 44x56 inches, first published in the *Illustrated Buffalo Express* April 14, 1895

of the Buffalo Hospital of the Sisters of Charity; the Fitch accident hospital, corner of Swan and Michigan streets, a department of the Charity Organization Society; the Riverside Hospital for Women, 2393 Niagara street, under the charge of Dr. Lillian C. Randall; and the Fresh Air Mission hospital, at Athol Springs. There are a number of eye and ear infirmaries and dispensaries, an account of which we are obliged to omit for want of space. The Railroad Branch of the Young Men's Christian Association has a hospital located on Broadway near Bailey avenue which is intended for emergency cases.

In 1845, there were no public hospital accommodations; in 1895, there is an aggregate of 3,000 beds.

IV.—Medical Societies.

The Buffalo Medical Association was organized July 2, 1845, at the office of Dr. Josiah Trowbridge, who was chosen president; Dr. Alden S. Sprague, vice-president, and Dr. Austin Flint, recording secretary. Previous to this there had been two attempts to create a medical society in Buffalo, the first of which was made July 19, 1831, when the village contained about 9,000 inhabitants. Of this society Dr. Cyrenius Chapin was president, and its last meeting was held June 5, 1832.

The first meeting of the second organization was held January 22, 1836, but this proved even a more significant failure than the other.

The first regular meeting of the Buffalo medical association was held at the office of Dr. F. H. Hamilton, August 5, 1845, at 8 o'clock P. M. Dr. Flint presented for inspection a heart with valvular lesions; Dr. Hamilton moved the appointment of a committee to collect information concerning fractured limbs, shortening and the like, and at the September meeting Dr. White presented a placenta with ossific deposit and reported a case of ovarian dropsy, caused by a severe fall on the abdomen. We have mentioned the reports of these three men at this time because they, perhaps more than any others, gave direction to the efforts of the society; but especially would we call attention to the pathology of ovarian tumors as then taught by the distinguished obstetrician and gynecologist, who for thirty-five years gave force and impact to the profession of Buffalo not only in his own department of medicine, but in a larger and more general sense. This is in strange contrast with the pathology of today, and it is a pleasant

thought that Dr. White was one of the first teachers to modify his earlier views on this as well as other subjects, always keeping pace with or leading progress, and lived to become one of the first abdominal surgeons of his time.

The only living foundation member of this society within our knowledge is Dr. James B. Samo, who is an honored member of the medical profession in Buffalo.

In 1856, the society was legally incorporated, its name changed to the Buffalo Medical and Surgical Association and a new code of by-laws was adopted which continued in force until June 3, 1879, when still another constitution and code of by-laws were put into operation. These governed until the

BUFFALO ACADEMY OF MEDICINE

was founded May 17, 1892. This latter organization was formed by grouping a number of associate societies under one administration, by which it was hoped to concentrate and make more cohesive the medical talent of the city. These societies were the Buffalo Medical and Surgical Association, which became the surgical section; the obstetrical society, that became the section on obstetrics and gynecology; the pathological society, that became the section on anatomy, physiology and pathology, and the clinical society, that became the section on medicine, materia medica and therapeutics.

The first officers of the academy, elected June 21, 1892, were: president, De Lancey Rochester, M. D.; secretary, William C. Krauss, M. D.; treasurer, Eugene A. Smith, M. D.; trustees, Drs. J. W. Putnam, A. Dagenais and Roswell Park.

The present officers are: President, Dr. Herman Mynter; first vice-president, Dr. W. S. Tremaine; second vice-president, Dr. Lucien Howe; third vice-president, Dr. H. U. Williams; fourth vice-president, Dr. C. C. Frederick; secretary, Dr. A. L. Benedict; treasurer, Dr. Eugene A. Smith; trustees, Drs. De Lancey Rochester, H. R. Hopkins and F. W. Bartlett.

Besides these there are several private medical societies, the oldest of which is the Medical Club that meets on alternate Wednesday evenings, and the Medical Union which meets the third Tuesday of every month. The Medical Society of the County of Erie meets in Buffalo, but as its constituency embraces the entire county it is out of place to enter into details of its history here. For a like reason we need only mention the Homeopathic Society of Erie County.

Finally, let it be remembered that Buffalo has now upwards of 360,000 inhabitants as contrasted with less than 30,000 when the first events occurred that are related in this narrative. We cannot accentuate the effect of this marvelous growth better than to call attention to the two views of the city that we publish. The first one—that of 1845—is from an old lithograph in possession of the historical society, reduced and engraved by Matthews, Northrup & Co., to which firm we are indebted for many courtesies in the preparation of this article. The view of Buffalo in 1895 is a triumph of art. It is a composite picture and the original, from which this is a reduction, is the largest of its kind ever made. Though Buffalo has grown rapidly, medicine has kept pace with the material increase of the city.

Before concluding this sketch it may not be out of place for the writer to remark that no one can be more conscious of its imperfections than himself. It does not, however, aim to be a complete history of medical affairs in Buffalo for the last fifty years; it would require a large volume to contain that. But it seeks—and with a truth, modestly—to give a résumé of the salient events of that period, and especially to group a mass of facts pertaining to the subject in the earlier years covered by the narrative. Again, it has been thought best to give by name those physicians who are now conducting the colleges, hospitals and societies in question, even at the risk of extending the article beyond the limits originally laid out. Finally, in the illustrations, we have again, so far as the buildings are concerned, sought to couple the past with the present, and, in some instances, to foreshadow the future, but in no instance have we thought it advisable to publish the portrait of a living individual. Had this rule not been adopted, it is doubtful if there had been an end to this article that is already too long.

William Warren Potter

We need not carry the argument further at this time, for every point is more clearly presented by the engravings that are herewith published of the St. Louis ambulance car, that is in successful operation in that city. The small interior view was kindly loaned us by the *Medical Mirror*, Dr. I. N. Love, editor and owner. The large engraving was reduced from an illustration that appeared in *Harpers' Weekly* March 23, 1895, made by the kind permission of Messrs. Harper and Brothers, publishers, Franklin Square, New York.

We subjoin a description of the car taken from the *Medical Mirror*, March, 1895 :

DESCRIPTION OF CAR.

The total length of the car is 33 feet, including the platforms, the inside measurements being 24 feet long by 7 feet 2 inches wide. The platforms are about one-half the width of the car, and front the left half of the body ; the car being double-ended, the steps leading to the entrance, and not to the platform. The doors are located at the right hand side of the ends of the car, the steps being four in number, placed obliquely and affording access from either front or side with equal ease, this arrangement having been adopted to facilitate the exit or entrance of litter-bearers. A telescoping brass hand-rail guards the outer side of the steps, and these are so arranged that they can be lifted when not in use, thus preventing access to the car. The entrances are 5 feet, 2 inches in width, the doors moving on rollers placed at the top, and grooved below over a metal edge, secured to the sill, excluding cold and dust.

The car is lighted by seven windows on each side, 28x28 inches in size, and stationary, the lower half frosted. There are two drop sashes in each door, and a number of ventilators or adjustable deck lights above on the sides and ends.

The interior of the car is divided in the middle by a wooden partition 5 feet, 6 inches high, placed four inches from the floor, with two doors swinging either way in the center, one compartment being for males and the other for females. The partition is so constructed that both parts may be swung back if desired, and rest closely against the sides of the car. A drop desk is hinged to one side of the partition for the surgeon's use. Two hinged shelves are provided, attached to the sides of the car, on which to place dressings, instruments, etc.

To the right of each door on entering the car is placed a large locker for litters, blankets, towels and the like, while between the windows are eight small ones for papers, medicines, bandages, instruments, etc. Immediately back of the large lockers are two earth closet conveniences, (Heap's patent,) for both sexes.

Electric bells communicating with both platforms are placed near the middle of the car for the use of the surgeon. A lavatory is also located there, supplied with water by a pump from a tank under the floor, the metal work being silver plated, as are the water coolers at each end of the car.

The interior is finely finished in cherry, there being no spaces for dirt to accumulate. The floor is of quartered oak, double, with asbestos filling to deaden the sound. The ceiling is of bird's-eye maple in panels. All the trimmings are solid bronze, polished.

Lighting is secured by ten incandescent burners, sixteen candle power, four being placed in each compartment and one outside above

INTERIOR TROLLEY AMBULANCE READY FOR USE.

each platform. The car is warmed by six electric heaters placed along the sides just above the base board and occupying but little space, being 30x7½x3 inches in size.

The body of the car is painted white, trimmed with gold and blue. The lettering on the sides reads: "St. Louis Health Department Ambulance Car," and the last two words are repeated on each end. The red Geneva cross is displayed on the sides and the ends to emphasise the humane purposes to which the vehicle is devoted.

The car is mounted on two pivotal trucks of special construction, having two sets of equalising springs over the oil-box in addition to the springs that carry the car body. This truck will greatly reduce the noise while crossing other tracks and make it an easy-riding car.

Under the center of the body of the car a space is enclosed in which to carry stretchers, splints and the like; and a water tank and ice box

are also provided under the car. The distance from the body to the rails is 3 feet, 3 inches. Draw bars are provided in case it should become necessary to tow the ambulance by means of another car. The car is equipped with an electric brake besides the usual hand brake, and arrangement is made for heating by electricity the water used in the lavatory.

The furnishings and equipment, supplied by the Health Department, consist of eighteen plain folding chairs, twelve having arms and six without arms, all provided with rubber fenders to prevent slipping and defacement of woodwork.

When in service it is proposed to man the car with a physician, who shall be known as Ambulance Surgeon, having equal rank with Assistant Dispensary Physician.

A male attendant with grade of day nurse is also to serve with the car, besides a motorman to be designated by the Union Depot Railroad Co., both in uniform, and under the orders of the surgeon while on duty.

RUN ON SCHEDULE TIME.

A time card will be prepared and published in order that the police and public may know when the car will be due at a given street or a designated point, enabling patients to be delivered aboard the car with but little handling or delay. This service, however, will necessarily be somewhat crippled until such time as track facilities to the several institutions are provided and patients can be landed under shelter at their doors; but this want will no doubt be supplied in due time. The experimental service begun by the department early in autumn with an ordinary car, proved the utility and superiority of this method of handling patients so conclusively that it could not be discontinued without detriment to the department.

This car could be readily adapted to the necessities of Buffalo, where trolley lines run in all directions, by laying short pieces of track to the entrance of such hospitals as need them and by placing switches near railway stations and wharves.

This service, once established, would do away with all competition among the hospitals. The patient would be taken to the hospital selected by himself or his friends or by the proper public officer as the case might be; or, perchance, to a private residence.

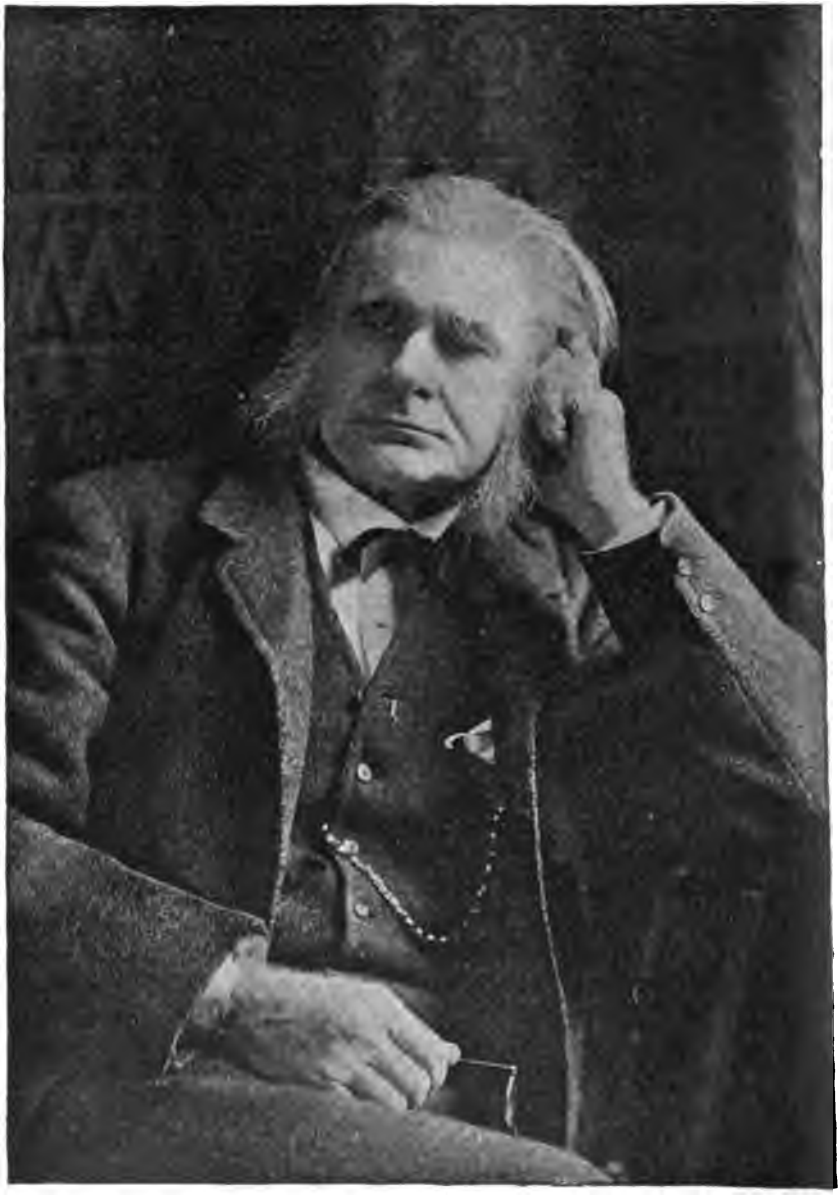
To establish this service into successful use it is requisite that there shall be coöperation between the mayor, department of health, the common council and the street railway managers. It is hoped that this will not be difficult to accomplish.

PROFESSOR THOMAS H. HUXLEY.

THE death of the eminent naturalist, Thomas Henry Huxley, that occurred at Eastbourne, England, June 29, 1895, deprives the world of the last but one of a group of the most illustrious scientists of his period. This group, composed of Darwin, Tyndall, Huxley and Spencer, have revolutionised thought and created a philosophy. They have established the doctrine of evolution in spite of an opposition that held sway for centuries and was so deeply rooted that only such a quartet of giant minds would have dared undertake to overthrow it. Darwin, Tyndall and Huxley are gone and only Herbert Spencer remains to round out the work of this phalanx of philosophers.

Professor Huxley was born at Ealing, Middlesex, Eng., May 4, 1825 ; hence, was just past seventy when he died. He was educated at Ealing school, where his father was a teacher, and at the age of seventeen he entered the Charing Cross medical school, London. Three years later he received the degree of bachelor of medicine, graduating with high honors in physiology. Soon afterward he entered the naval service as a medical officer and went with Stanley's expedition to the Eastern Archipelago. During the voyage he studied the natural history of the sea and devoted much attention to the Medusæ. After his return to England he was appointed professor of paleontology in the Government school of mines at London, and was also made Fullerian professor of physiology to the Royal Institution and examiner in physiology and comparative anatomy at the University of London. He went with Tyndall, in 1856, on his first trip to the Alps, and in 1858 he was made Croonian lecturer to the Royal society. About this time he gave numerous lectures on the relation of man to the lower animals. In 1863, he became professor of comparative anatomy at the Royal college of surgeons, where he remained seven years. In 1872, he was made lord rector of Aberdeen university, and in 1873 he was was chosen secretary of the Royal society. In 1881, he was made inspector-general of fisheries, succeeding Frank Buckland, and on the death of Mr. Spottiswoode, in 1884, Professor Huxley was elevated to the presidency of the Royal society. During a visit to America, in 1876, he delivered a series of lectures that attracted great attention and which were widely published.

Professor Huxley began his literary work while he was studying



PROFESSOR THOMAS HENRY HUXLEY.

medicine at the Charing Cross hospital. His writings did much to popularise science. They include Oceanic Hydrozoa and Man's Place in Nature, 1863; Lessons on Comparative Anatomy, 1864; Lessons in Elementary Physiology, 1866; An Introduction to the Classification of Animals, 1869; Lay Sermons, Addresses and Reviews, 1870; Manual of the Anatomy of Vertebrated Animals, 1871; and Critiques and Addresses, 1873. Other works were on Origin of Species, More Criticism on Darwin and Administrative Nihilism, American Addresses, Physiography, The Crayfish, Science and Culture, and the Advance of Science in the Last Half Century.

The degrees conferred upon Professor Huxley were, M. D., Ph. D., LL. D., and D. C. L., but he was a member of the principal scientific societies of the world, from which he received many honors and decorations.

During the last ten years of his life he remained in practical retirement, so that of late the world has known less of him than formerly. For the beautiful picture we present of this great man we are indebted to the courtesy of the *Scientific American*, and we have gleaned many data of this sketch from the issue of that paper for July 13, 1895. Huxley had a contempt for autobiographies, but once sketched his own character, says the *Scientific American*, in the following words:

'That man has a liberal education who has been so trained in youth that his body is the ready servant of his will and does with ease and pleasure all the work that, as a mechanism, it is capable of; whose intellect is a clear, cold logic engine, with all its parts of equal strength and in smooth working order, ready, like a steam engine, to be turned to any kind of work and spin the gossamers as well as forge the anchors of the mind; whose mind is stored with a knowledge of the great and fundamental truths of nature and of the laws of her operations; one who, no stunted ascetic, is full of life and fire, but whose passions are trained to come to halt by a vigorous will, the servant of a tender conscience; who has learned to love all beauty, whether of nature or of art, to hate all vileness, and to respect others as himself. Such a one, and no other, has had a liberal education.'

The *Scientific American*, in concluding, most truthfully and delicately asseverates that "the world can add no higher tribute to the author of these words than to say that such a man was Thomas Henry Huxley."

Obituary.

DR. EDWARD RUSH PALMER, of Louisville, Ky., died on the night of July 5-6, 1895, from the effects of an injury received in a bicycle collision while riding on the Third street boulevard in the city of his home. The accident occurred late in the evening of July 5th, by which he was hurled headlong against the curbstone. He almost immediately became unconscious from a fracture of the base of the skull, and was taken to the Norton Infirmary, where he died at 12.30 A. M., July 6th.

Edward Rush Palmer was born in Woodstock, Vt., November 18, 1842. His father, Dr. Benjamin Rush Palmer, removed with his family to Kentucky when his only son, Edward, was eight years old, where he became professor of surgery in the University of Louisville. Edward R. graduated in medicine in 1864 from this same school and then made haste to enter the medical corps of the army. He served in military hospitals in Louisville and Lebanon, and at the end of the war returned to his home, where he entered upon the general practice of medicine. About ten years ago he abandoned his large family practice to devote himself to the specialty of genito-urinary surgery, in which he became celebrated. In 1868, he was chosen professor of physiology in his Alma Mater and held a chair in that institution until he died. In 1893, he was elected president of the American Association of Genito-urinary Surgeons, and attended its last meeting at Niagara Falls, May 29–30, 1895. He was also a member of the American Medical Association, of the Mississippi Valley Medical Association, of the Kentucky State Medical Society, of the Medico-chirurgical Society of Louisville, and was president and one of the founders of the Surgical Society of Louisville.

It is not often that we are called upon to record such a painful incident in these columns. Dr. Palmer was a man who took great enjoyment in life and though turned well into the fifties he was as fresh and vivacious as a boy in his 'teens while yet strong in his well-ripened manhood. He had everything to live for and every expectation of longevity. He was surrounded by an interesting family, consisting of a lovely wife, a charming daughter, well grown into young womanhood, and two manly sons, both graduates of Princeton and who expect to take their medical degrees next year. His accomplishments were many and versatile. A lover of art, a

student of nature, cultivated in music and a clever conversationist, he was, at once, an attractive man, a delightful companion, an earnest friend, whose loss will be felt for many years in society as well as in every other walk which men of such rare attainments grace by their presence.

EDWARD RUSH PALMER, M. D.
November 8, 1842—July 6, 1895.

And Dr. Palmer was a physician singularly gifted in professional acquirements. A teacher of conspicuous excellence, a general practitioner of medicine for many years of unusual skill and judgment, and more recently a specialist of national fame enjoying the confidence of a large clientele and a widely distributed group of his professional brethren, it is difficult to appreciate how a man and a physician could have been more charmingly surrounded with everything that goes to make life delightful than Edward

Rush Palmer, whose spirit went out with a flash on that fateful July evening and who died regretted by every person who knew him.

Mr. George Stranahan, son of Dr. C. W. Stranahan, of Erie, Pa., died July 22, 1895, from injuries received in a bicycle accident. To avert a collision with an inexperienced young woman rider, Mr. Stranahan threw himself, receiving a concussion that resulted in cerebral hemorrhage. Dr. Roswell Park was summoned together with a number of physicians in Erie, but their efforts to save life were futile. Young Mr. Stranahan had been a student at Buffalo University medical college for three years. Dr. C. W. Stranahan, his father, is one of the best known physicians in Erie and will receive the sympathy of a wide circle of professional and other friends.

William Henry Schieffelin, senior member of the long-established drug house of W. H. Schieffelin & Company, New York, died June 21, 1895, in the fifty-ninth year of his age. Mr. Schieffelin was one of the best known business men in the country and the house, of which he was the head, signalised the centennial anniversary of its establishment by issuing last year a handsome artistic brochure that was noticed in these columns. Mr. Schieffelin served creditably during the late war and was a companion of the Military Order of the Loyal Legion.

Personal.

Dr. Daniel Lewis, of the city of New York, was elected president of the State board of health at a meeting held in Albany, July 23, 1895. Dr. Lewis is one of the best known medical men in the state, has been president of the medical society of the state of New York and of the medical society of the county of New York, and is now vice-president of the New York academy of medicine. His unanimous election to the honorable and responsible office of president of the State board of health is a matter of supreme satisfaction from one end of the state to the other.

Dr. George B. Fowler, of New York, has been appointed health commissioner of that city vice Dr. Cyrus Edson, resigned. Dr.

Fowler was graduated from the New York College of Physicians and surgeons in 1871, and has since been in the active and successful practice of his profession, in which he has taken extremely high rank. He is a member of the County Medical Society and of the Academy of Medicine, and is visiting physician to Bellevue Hospital and the New York Infant Asylum.

Dr. James T. Jelks assumed editorial charge of the *Hot Springs Medical Journal*, beginning with the June issue, 1895. Dr. Jelks is professor of gynecology and syphilology in the Barnes Medical College, St. Louis. His ability as a writer and teacher is a guarantee of able editorial conduct of the *Hot Springs Medical Journal.*

Dr. Richard H. Satterlee, of Buffalo, has been appointed oculist for the Buffalo street railway company and also for the Buffalo, Rochester & Pittsburg railway. It is a wise provision on the part of the street railway to inspect the vision of its motor men and to insist upon the highest exercise of that function.

Dr. I. N. Love, of St. Louis, editor of the *Medical Mirror*, departed for Europe, late in July, to attend the meeting of the British medical association. He will return in season to attend the meeting of the Mississippi Valley medical association in Detroit, September 4–7, 1895.

Dr. L. S. McMurtry, of Louisville, surgeon in charge, announces that the Jennie Casseday Infirmary for women will be closed from August 1 to September 5, 1895. During his vacation Dr. McMurtry will visit Buffalo and will spend some time at Niagara Falls.

Dr. Charles A. L. Reed, of Cincinnati, has closed his hospital in St. Leger place and sailed for Europe to join his family. He will return with Mrs. Reed and children early in September, when his private hospital will be reopened for patients.

Dr. Bransford Lewis, of St. Louis, having resigned his position in the Missouri medical college, has been elected professor of genito-urinary surgery in the College of Physicians and Surgeons and genito-urinary surgeon to the Baptist hospital.

Dr. H. Y. Grant, of Buffalo, accompanied by Mrs. Grant, sailed Monday, July 29, 1895, on the North German Lloyd steamer "Havel" for a two months' tour in Europe.

Dr. Frederick W. Smith, of Syracuse, has been appointed a member of the state board of health in place of Dr. F. O'Donohue, whose term of office has expired.

Dr. John B. Murphy, of Chicago, sailed for Europe, on the "Etruria," July 20, 1895, to attend the meeting of the British medical association. He will be absent about a month.

Dr. A. W. Hurd, superintendent of the Buffalo state hospital, sailed for Europe, July 20, 1895, to be absent a few weeks. He was accompanied by Mrs. Hurd.

Dr. Henry J. Mulford, of Buffalo, has removed from 56 Allen street to 466 Franklin street, where he will continue the practice of his specialty, laryngology.

Dr. John Hauenstein, of Buffalo, has removed from 499 Washington street to his fine up-town residence, 309 Elmwood avenue.

Dr. Walter B. Dorsett, of St. Louis, has removed his office from 3323 Lucas avenue to his residence, 3941 West Bell place.

Dr. D. W. Harrington, of Buffalo, is at present enjoying a tour in Europe and is announced to return about September 1, 1895.

Dr. Joseph Fowler, of Buffalo, has removed his office from 33 Church street to 141 Delaware avenue.

Society Meetings.

The American Laryngological Association held its seventeenth annual meeting in Rochester, June 17, 18 and 19, 1895, under the presidency of Dr. John O. Roe. This was one of the best meetings in the history of this famous society. Dr. William H. Daly, of Pittsburg, was elected president for the ensuing year.

The American Orthopedic Association will hold its ninth annual meeting at Chicago, September 17, 18 and 19, 1895, under the presidency of Dr. John Ridlon, of Chicago. Dr. Bernard Bartow, of Buffalo, the first vice-president of the association, will read a

paper on Forcible correction and corrective jackets in the treatment of scoliosis; and Dr. Roswell Park is announced for a paper on The deformities produced by acute inflammatory lesions in bone.

The Mississippi Valley Medical Association will hold its twenty-first annual meeting at Detroit, September 3, 4, 5 and 6, 1895, under the presidency of Dr. William N. Wishard, of Indianapolis. A preliminary program containing the announcement of about sixty papers has been issued by the secretary, Dr. F. C. Woodburn, of Indianapolis.

DR. WILLIAM N. WISHARD.

The meeting promises to be a large one and ample arrangements for its scientific work and social festivities are preparing under the leadership of Drs. H. O. Walker, Eugene Smith and others. Detroit is within such easy reach of Buffalo, that a goodly number of physicians from this city can reasonably be expected to attend.

Preliminary program of the American Association of Obstetricians and Gynecologists, eighth annual meeting at Auditorium Hotel, Chicago, September 24, 25 and 26, 1895: 1. President's annual address, J. Henry Carstens, Detroit. 2. Relation of pelvic suppuration to structural changes that may occur in the Fallopian tubes, A. P. Clarke, Cambridge. 3. Nephrorrhaphies, George Ben Johnston, Richmond. 4. Detached fibroids, George H. Robé,

Catonsville. 5. A clinical contribution to lateral displacements of the uterus, Edward J. Ill, Newark. 6. Appendicitis, A. Vander Veer, Albany. 7. Intermediate treatment of puerperal sepsis, A. B. Miller, Syracuse. 8. Kraurosis Vulvæ, a contribution to its pathology and therapeutics, H. W. Longyear, Detroit. 9. Report of three recent cases in gall-bladder surgery, Edwin Ricketts, Cincinnati. 10. Subject to be announced, H. E. Hayd, Buffalo. 11. Intestinal obstruction following peritoneal operations, A. H. Cordier, Kansas City. 12. Subject to be announced, S. Y. Howell, Buffalo. 13. Cure of tubal distention without laparatomy, F. A. Glasgow, St. Louis. 14. Subject to be announced, W. B. Dorsett, St. Louis. 15. Subject to be announced, C. C. Frederick, Buffalo. 16. Hysterectomy in bilateral diseases of the appendages, giving remote results, Florian Krug, New York. 17. *Discussion:* Vaginal hysterectomy *versus* Abdominal section for pus tubes. (*a*) Title unannounced, (affirmative,) X. O. Werder, Pittsburg. (*b*) When shall hysterectomy accompany bilateral removal of the appendages? Reuben Peterson, Grand Rapids. (*c*) Pathological and surgical contra-indications of the vaginal route in dealing with puriform diseases of tubes and ovaries, Joseph Price, Philadelphia. (*d*) Title unannounced, (affirmative,) Geo. H. Rohé, Catonsville. 18. *Discussion:* Eclampsia gravidarum. (*a*) Etiology, Frederick Blume, Allegheny. (*b*) Pathology, George F. Hulbert, St. Louis. (*c*) Title to be announced, W. H. Taylor, Cincinnati. (*d*) Prophylaxis, H. W. Longyear, Detroit. (*e*) Title to be announced, W. P. Manton, Detroit. (*f*) Treatment, J. M. Duff, Pittsburg; A. H. Wright, Toronto; Thomas Lothrop, Buffalo. 19. Exhibition of various types of rectal papillæ, R. T. Morris, New York. 20. Subject to be announced, E. Arnold Praeger, Los Angeles, Cal. 21. Ruptured interstitial pregnancy, L. H. Dunning, Indianapolis. 22. Has gynecology received just recognition as a specialty? M. B. Ward, Topeka. 23. Subject to be announced, L. S. McMurtry, Louisville. 24. Pneumo-peritoneum, James F. W. Ross, Toronto. 25. Subject to be announced, J. B. Murphy, Chicago. 26. Subject to be announced, Charles A. L. Reed, Cincinnati. 27. Subject to be announced, M. Rosenwasser, Cleveland.

The regular program will be issued September 1st.

J. HENRY CARSTENS, *President.*

WILLIAM WARREN POTTER, *Secretary.*

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Original Communications.

OBSERVATIONS ON RECTAL SURGERY.[1]

BY J. M. MATHEWS, M. D., Louisville, Ky.,

Professor of surgery and diseases of the rectum, Kentucky School of Medicine.

WHEN the invitation came to me to read a paper before this association I must confess that there seemed to be no time at my disposal. But having been in attendance at the American Medical Association, in Baltimore, I extended my trip to the east, in order to be with you tonight. I have thought in selecting a subject for the occasion that it was the proper thing for the shoemaker to stick to his last, so I propose to take some of your valuable time in discussing :

Some Points in Rectal Surgery.—Eighteen years ago I first conceived the idea, and after much hard work put it into execution, of making diseases of the rectum a specialty. At that time there was no such specialty either in this country or in Europe. Since then some one or more distinguished surgeons, in every large city of the union, have adopted the specialty. This, of course, is gratifying to me. I shall reserve the right in this paper to express an individual opinion upon all subjects touched upon, and in differing from others I mean no disrespect and do not wish to appear either dogmatic or egotistical. I shall refer in the paper only to those points that are mooted.

Hemorrhoids.—Authors who have written specially on diseases of the rectum have divided hemorrhoids into two main classes : first, external ; second, internal ; and then have subdivided the classification into varieties of two external and three of internal. Of the first, a tag of skin or a thrombotic tumor go to make up this class. Of the second variety, such terms as arterial, venous

1. Read before the Niagara University Alumni, Buffalo, N. Y., May 16, 1895. By invitation.

and capillary are used to express them. Now, in truth, it makes very little difference with the operator whether piles are classed at all. For convenience sake it would be much better to say, with Mr. Erichsen, "all external piles should be cut off and all internal piles tied." In my opinion the universal advice given, to let out the clot of a thrombotic pile, is non-surgical. After such an incision is made it takes the inflamed tissue which is left just as long to disappear by reabsorption as it would have taken nature to absorb the clot. In a word, then, all external piles should be cut off. A clean even base is left, and the patient is well in one-half the time when compared to the other plan.

Internal Piles.—It matters very little with the operator whether internal piles are venous, arterial or capillary in nature. To diagnosticate such would not alter the operation in the least. Again, the classification is erroneous, for the reason that no hemorrhoid is made up exclusively of arteries, veins or capillaries. As to the method of ligating piles, I object to the plan usually named as that of Mr. Allingham, but is the one proposed by Mr. Salmon—namely, that the cut should be in the sulcus, or white line, and carried down to the base of the pile, and after ligating, that but a small portion of the pile should be cut off. If superfluous skin exists around the anus, it is much better to include it all in the incision made and by the ligature used. If such mass is transfixed and tied tightly, it should be cut off in such a manner as to leave but a small base to slough. The idea that a contraction takes place after such an operation is chimerical, and even if it did, one dilatation with the speculum would overcome it. After operating upon over 2,000 patients for piles, I have never encountered contraction but in two cases, and they were relieved in the manner described. I have said that all internal piles should be tied, because my experience has taught me that compared with all other methods the ligature is the simplest of execution, freer of danger and most radical in its results.

Fistula in Ano.—This term does not in fact bear out the significance intended. Very few fistulæ in this region relate to the anus at all. Many of them communicate with the rectum, and some fistulæ in this neighborhood neither affect the anus or rectum. A buttock may be extensively invaded, the perineum destroyed, or a sinus run high up the back, when it will not be necessary to follow the time-honored injunction to push a director through the sinus into the rectum and divide all the tissues thereon, including

the sphincter muscle or muscles. Indeed, such a procedure would be out of the question in many of these cases. From time immemorial anal fistulæ have been divided into three varieties—namely, external, internal and complete. Great stress is laid upon the importance of finding the internal opening of a fistula before operating. So far has this fallacy gone that I have known surgeons to refuse to operate for fistula in ano because the internal opening could not be found. This is sheer nonsense. After the main cut is made for fistula, how easy it is to trace the channel to an internal opening, if one exists. I desire to say in this connection that no idea whatever can be conveyed to the surgeon by the appearance of the external opening of a fistula. Some of the most serious cases that I have ever operated upon were those having a small, insignificant opening. Many times a whole buttock will have to be sacrificed to effect a cure in such cases. The etiology has much to do with determining the method of operating, looking to its cure or eradication.

To classify the disease simply by physical signs, such as external, internal and complete, gives but a faint idea of its nature. Or to describe a fistula as a narrow channel, or sinus, lined with a so-called pyogenic membrane, is so far fetched as not to deserve recognition. No membrane ever secreted pus, and yet this term *pyogenic* is still used by some writers. Again, very few fistulæ are ever seen which are made up of a narrow channel or sinus. If such terms should be taken as guides in estimating the amount of disease, or mapping out an operation, not one in fifty cases would ever be cured. A far better division of fistula in ano, in my opinion, would be,—namely, progressive and non-progressive. Some fistulæ can be left without an operation for an indefinite time. Others are so distinctive and destructive in their nature as to require immediate attention. Instead of mere sinuses in the region of the rectum, well-formed cavities with a continued disposition to break down tissue will often be found. Outside of the risk of sepsis in such cases, the local destruction may be so great as to render the individual a cripple or an invalid for life. It is a well-recognised fact that abscesses around the rectum, in a heavy percentage of cases, end in fistulæ. Many account for this fact by the statement that the circulation here is impeded by the absence of valves in this portion of the blood circulation. But a factor of far greater importance is overlooked—namely, that the tissues being soft, fatty and often flabby, are unable to resist the inflammatory pro-

cess. Besides, it must be remembered that certain diatheses, or cachexias, render these tissues peculiarly susceptible to the destructive process of inflammation. But even in healthy tissue the inroad from the inflammatory deposit is often such as to make an active and destructive condition that, unless heeded at once, ends in a serious complication of affairs. With this idea in mind, I would suggest some things which I think necessary in the successful treatment of this very troublesome affection. Speaking from a large and varied experience in surgery, I desire to say that it requires more delicate and precise operating to cure a complicated condition of fistula in ano, than any other surgical affection of which I can think. In referring to the treatment of fistula I shall have nothing to say of the use of caustics, injections, ligatures and the like, proposed by some for the cure of this affection. They are, to say the least of them, unsurgical and unsatisfactory. It is well known that there are comparatively few cases of fistula in ano that are limited to a single tract. Indeed, the most prominent thing that should be brought out in operating for this trouble, is the laying open of all communicating branches. This can only be done, of course, by the use of the knife. It is too common with the profession to think of fistula in ano as simply an opening from the true skin down to or into the bowel. The fact is that all adjacent parts to the rectum may be undermined or invaded by these fistulous channels. It can be easily understood, looking to the pathology of this affection, that no treatment can compare with the knife in dealing with it. By its use all sinuses can be divided, the bottom of fistulæ cut through and overhanging edges trimmed away, these precautions being absolutely necessary to a cure in such cases. The old idea that fistula in ano acted as a derivative in tubercular affections of the lungs is, of course, obsolete and appears in a ridiculous light today. Therefore, the early eradication of the trouble, even in tubercular subjects, is much to be desired, and which can often be accomplished by an operation.

Ulceration of the Bowel.—I am constrained to believe, from my correspondence with physicians and the knowledge gained in consultation, that the opinion prevails that ulceration of the rectum (benign) is of the most frequent occurrence. I wish to go on record as saying that it is the most infrequent of all rectal troubles. Indeed, in eighteen years of experience in this line, I have not seen half a dozen cases of ulceration of the rectum due to simple

causes. This alone would force me to believe that the statement of writers that this trouble is a frequent occurrence is chimerical. Mucous membrane is very seldom the seat of ulceration, except it be of a special diathesis. So well pronounced are my views on this subject that I desire to state without argument, whenever I see a well-pronounced case of ulceration of the rectum I am at once convinced that it has its origin in one of three conditions—namely, syphilis, tuberculosis or malignancy. As I have put myself on record in my work on Diseases of the Rectum, as saying that such causes of ulceration of the rectum as dysentery, pressure of the child's head, constipation, and the like, are of the rarest occurrence, I would respectfully ask that the members of this society call up any such cases in their minds and report them. So well persuaded am I that all such combined are insignificant as a cause of ulceration, that whenever I see an ulcer of a pronounced type in this portion of the gut, I know that it is of a much more serious origin than from any such causes as these. The three great factors, therefore, in my opinion, in producing ulceration of the rectum are tuberculosis, syphilis and cancer. With either one as a cause, ulceration is a grave affair. If stricture of the rectum should result from any cause outside of these, it is easily remedied. It must be seen that such a stricture could only involve the mucous membrane, and would be annular in appearance. A simple dilatation would effect a cure. But a very different condition of affairs would result from either one or the other of the three mentioned causes. In other words, a stricture from pressure, trauma, dysentery, and the like, would be a benign or simple stricture. Whereas from the last mentioned—namely, tuberculosis, syphilis or cancer—the stricture would be secondary to a constitutional affection. We are too apt to look for a demonstration of tuberculosis in the lungs, possibly in a joint, when, from a later study of the disease, it is recognised that the tubercular bacilli may have as a starting point any tissue, or tissues, of the body. Notably is this true of the rectum. My record books show many cases where tuberculosis has attacked the rectum and left other tissues unaffected. In regard to syphilis as a cause of ulceration, with consequent stricture, I have before this given it as my opinion that fully *sixty per cent.* of such cases result from this cause. I only ask a careful compilation of your cases to verify this statement. In this connection I wish to give it as my opinion that stricture of the rectum resulting from syphilis is just as incurable as cancer, the only difference being that

cancer kills more speedily, and that the sufferer from syphilitic stricture has a longer lease on life. Strictures from cancer often exist without the manifestation of the pronounced symptoms that we usually expect. Indeed, there are many cases recorded from my practice where only constipation was complained of, with some reflex pain in contiguous organs. Of course, this only holds good when the growth is located above the sphincter muscle and does not involve it.

Treatment.—Of course, I can only suggest the manner or method of treatment of ulceration of the rectum, not having the time to enter into a full description of any plan. For a tuberculous ulceration there can be but one method to suggest. In the light of modern research it must be conceded that tubercular disease can have its origin or starting point in any tissue. The lungs may be secondary, in this trouble, to any other portion of the body. The surgeon meets with a tuberculous knee-joint, he excises it; if with tuberculous bone, he removes it, not only for its local effect, but from the knowledge that a general infection can take place from such foci. Therefore, if a tuberculous ulceration of the rectum exists, it must be thoroughly curetted. I am confident that I have prevented a general infection in a number of cases by a full and complete curettement of the rectum. Of the syphilitic rectum nothing so good can be said. Whatever may have been the opinion of pathologists a decade ago, it must be agreed today, if syphilis affects the rectum, it is by a secondary deposit,—by a gummatous building-up process. This assumes a fibrous condition beyond the power of nature to reabsorb. We must, therefore, accept the ultimatum and do the best we can. I believe that the landmarks are plain enough and the physical signs sufficient to draw the diagnostic line between strictures from this cause and the other sources I have mentioned. I might concede that, if syphilitic ulceration of the rectum was detected in its incipiency, constitutional medication might effect some good. But not so with the condition of which we are speaking.

When a decided stricture exists it becomes a matter for surgical interference. What shall it be? I am familiar with the fact that some writers deal with all serious ulcerations or strictures of the rectum in one of two ways surgically, *i. e.*, total excision or colotomy. I am averse to both. If syphilis has affected the lower rectum, and results in stricture, it certainly appears advisable to divide or break the stricture and avoid the opening in the

side. Especially is this true when we recognise that the process of infiltration is more or less self-limited, and we have nothing to fear in the extension of the disease except the obstruction. A free proctotomy in such cases is much better than a colotomy. If a stricture, the result of syphilis, exists in the movable or the upper rectum, I believe that it is an ideal case for a colotomy. It is a localised condition without the power of extension; nature cannot absorb it, and obstruction results, which to all intents and purposes is purely mechanical. If it is dangerous to dilate, an opening can be made above, and the patient live indefinitely. How different from a cancerous stricture! The destructive process goes on, ends in death, regardless of the colotomy. In cancer of the rectum, or cancerous stricture, the two methods mentioned—namely, total extirpation or a colotomy—is resorted to. First, let us consider the propriety of total excision. With so many to recommend it, I feel some diffidence in entering my protest against it. Mr. Kraske has designed a most excellent operation for the removal of the rectum. But I would beg to ask, When is the operation justifiable? There are two propositions that I would submit for argument in reasoning against this operation. First, is the patient ever cured of the trouble operated for by said operation? Second, is the patient ever materially benefited or relieved by the operation? I beg to take the negative to both propositions. First, I take it for granted that the only cause for which it could be said that total extirpation could be advised is malignancy. I use the term synonymous with cancer. We note, then, the characteristic features of malignancy as follows: the disposition to grow, to ulcerate, to infiltrate and to propagate. It is an aphorism well known in surgery in cases of cancer, to "operate early if you desire success." All teachers, too, know how assiduously they teach the student to do a thorough operation, and "cut wide of the mark" whenever dealing with this character of tumor. For instance, when removing malignant growths of the breast, how important it is, we say, to remove the glands in the axilla also. Again, how insidiously does a cancer invade the system and establish a cachexia. How difficult to tell the dividing line between a local condition and a general infection! Add to this the suspicion always that the tumor has likely propagated. These questions are difficult of solution, even when the growth is situated upon the external parts. How much more difficult when located in an obscure part of the

anatomy, as in the rectum! Cancers found here are so stealthy in their growth and in the invasion of tissue that oftentimes the whole rectum is blocked by the mass, when only symptoms of constipation and some reflex pain are complained of. Tissues surrounding this portion of the gut are soft and easy of invasion, the blood circulation is great, the lymphatics are freely distributed. The contiguous parts are vital ones—the bladder, peritoneum, the prostate gland and the vagina in the female, are all easy of invasion. By the time that a growth in the rectum has assumed sufficient proportions to be diagnosticated as cancer, many of these parts are already invaded by the process of infiltration. To dissect and draw down the rectum, in the normal state, may be comparatively an easy matter, but to completely dissect out a rectum that is so pathologically changed, as in a cancerous growth, is nearly an impossibility. Besides the difficulty of accomplishing its free dissection, it is one of the bloodiest operations that I have ever attempted. Admit that it can be successfully done, what amount of good accrues to the patient? Infiltration is clearly proved by the amount of adhesion that is witnessed. Can we now "cut wide of the mark?" I believe that every surgeon present will concur in the opinion that to make the operation complete all glands in the inguinal region should be removed. But what about the infiltrated tissue left in and around the rectum? Then, of what use is the operation? A bloody procedure, rectum gone and infiltrated tissue left. Would any sensible surgeon dissect out a cancer in the breast and cover the wound with infiltrated flaps? Why, then, should a surgeon dissect out a cancer of the rectum and leave infiltrated tissue? If a growth of the kind is situated in the lower part of the rectum, of course it can and should be excised, for we take the precaution here to "cut wide of the mark." It may be said that after excision the patient lives for several years (?).

I shall not take your time to enter into an argument *pro* or *con* concerning colotomy for the relief of cancer of the rectum, but will make it suffice to offer a few suggestions for your consideration. It must be a well-recognised fact that in the majority of cancers of the rectum located above the sphincter muscle, pain is not a factor. It must also be admitted that, as a rule, these patients do not suffer from obstipation to any marked degree. Why, then, do a colotomy for the relief of pain that does not exist, or for an obstruction that oftentimes does not take place?

No one will contend that by doing a colotomy, cancer of the rectum is either cured or its progress materially stayed. If an obstruction does exist and is within reach of the finger, it is much better to do a proctotomy than to open the side. It is a disgusting operation at best, promising very little, and should be avoided if possible.

A STUDY OF THE ORIGIN AND NATURE OF PAIN.[1]

By HERMAN G. MATZINGER, M. D.,
Second Assistant Physician, Buffalo State Hospital.

NO OTHER phenomena connected with the life history of the human body has been so great a factor in the historical development of medicine as pain. Indeed, it can readily be conceived that the first medical thought and effort was prompted by and directed to the relief of pain. And yet, though it is undoubtedly the most universal symptom of disease, there has been no entirely satisfactory explanation of its nature and mode of operation.

At present, two views are commonly held, one being the direct result of the insufficiency of the other, and both alike untenable because of lack of anatomical proof. The first was arrived at through the observation that pain is often associated with intense irritation of the end-organs of nerves of special sense, and holds that the sensation of pain differs only in degree from ordinary sensation; that the same nerve conveys both; that this is a common property of all the nerves of sensation, no matter what their special office may be.

There is, however, an unmistakable intrinsic difference between ordinary sensation and pain, which makes it impossible to accept that they are of the same nature. Both may occur together in the same place at the same time. If the greater irritation claims the operation of the nerve, how may it be that the lesser one is also conveyed and with equal certainty? Take, for instance, an inflamed condition of the skin associated with pain, and you will find that the tactile sense is not lost in the affected area. This observation led to the second view—namely, that there must be a special set of what might be termed pain nerves, running parallel and in the same trunk with the sensory nerves, having a special center

1. Read before the Pathological Section of the Buffalo Academy of Medicine, January 15, 1895.

of perception in the brain, and operating only under the influence of intense irritation.

But, anatomically, there is no basis for such a theory; neither physiologically, since pain is a pathological phenomenon, and we have yet to find an organ, tissue or cell intended for anything but painless physiological functions. It is altogether unlikely, and contrary to natural laws, that there should be an elaborate mechanism of highly organised tissue, which is destined never to come into use in some individuals, or, at least, only in a very limited way.

Neither of these theories throws any light on the problem, so that we shall have to look elsewhere for a possible explanation.

Let us consider for a moment the conditions usually associated with pain and considered as pain-producing influences.

According to the first theory, an irritation of peripheral endings of sensory nerves, carried beyond a certain degree, produces pain. This might answer in parts where the nerve ends in tactile corpuscles, or some other special arrangement, but does not explain how the same irritation produces pain in tissues in which the nerve does not end in that way. The natural inference is, that only irritation of tissues containing special endings can be the seat of pain, which obviously does not hold.

Pressure is said to cause pain, and so it does, but the pain becomes more intense after the pressure is removed, and this is not due to injury to sensory nerve endings, since they functionate as well after the pressure is removed as before. Tumors often develop to great size and exert great pressure without producing pain.

It is well known that normal muscle action causes increased chemical changes in the muscle tissues, the products of which, under ordinary circumstances, are readily and promptly removed. But, if this becomes too rapid from over-exertion or prolonged exertion, the ordinary blood current is unequal to the task, transition products accumulate, and muscle tire is the result, which is quickly carried to the point of pain. This pain is not due to the pressure coincident to muscle contraction, because it is more intense when the muscle is at rest than when in action.

Pain has always been considered one of the cardinal symptoms of inflammation, and the tissue changes occurring during inflammatory processes are well known to be of the most profound nature. It is of special importance to note that during the early stages of

inflammation, when the new products are being formed, embarrassing the local circulation, the pain is most intense, while after the exudate is collected, even in great quantities, it is not so intense, in spite of the great pressure. Many other illustrations could be mentioned, which seem to prove that pressure has little to do directly with pain, and that it is more likely to be the result of an abnormal, more or less intense, chemical tissue change in the part affected, which may be due to various causes, but is always associated with changes in the circulation in the part affected.

This holds good even for those portions of the body supplied with nerves of special sense. It was formerly thought that the pain produced by intense light was due to over-stimulation of the optic nerve-endings in the retina, but it is now universally accepted that the optic nerve is not directly affected by light, but through the medium of a photo-chemical change in the rods and cones, which, when carried too far, modifies or stops stimulation of the optic, recorded as vision, and produces pain. This is analogous to the phenomenon of muscle tire. Moreover, it has been observed that in conditions of total blindness, due to atrophy of the optic nerve, very intense light produced pain.

The pain associated with sunburn is due not to the degree of heat, but the action of the chemical rays of the spectrum. Electric light is especially irritating to the eye and skin, because it contains so large a proportion of violet rays. The degree of heat does not produce pain of itself until it either rises or falls to the point at which it produces protoplasmic changes.

Nor can the greater or lesser intensity of waves of sound be considered as producing earache or pain. The report of a cannon does not give us pain any more than the piping of a mouse. Loud and shrill sounds cause discomfort no more marked or disagreeable than the softest discord to the highly sensitive ear. If real pain be produced by violence of sound waves, it is more likely due to mechanical injury to the tympanum or oscicles, and continues long after the first cause has been removed.

The pain produced by the continuous electric current is easily explained by electrolitic cell changes, produced in nerve and tissues alike, while, if operating on the sensory nerves alone, sensation would only be produced by closing and breaking of the circuit, as is shown by its effect on motor nerves. The effect of the induced current is altogether different in this respect, and seems neither a sensation of touch, pressure nor pain. It may be a mixture of all,

and, if continued long enough, may eventually produce real pain by working changes in cell nutrition.

Granting all this, it is not unreasonable to assume that pain originates in tissue change of a chemical nature, whose products are abnormal, at least in quantity, and that this change occurs principally in tissues other than nervous. But, to prove this, we must find some direct connection between them and the central nervous system.

We find that almost everywhere, but especially in connective tissue, there are numerous very fine simple nerve-endings that necessarily must be in connection with some large system of equally general distribution, and there is none other than the one that accompanies the blood-vessels—the vaso-motor system—that fills the requirements. Of these, the branches starting with the spinal nerves are the most suitable for study. The spinal nerves are mixed trunks, and contain besides motor and sensory fibers a third variety derived from the spinal ganglia of the sympathetic system, through their communicating branches. In their course to the periphery, these latter, unlike the other fibers, branch frequently in every direction, and follow the blood-vessels to their very smallest sub-divisions. They also form numerous plexuses containing ganglia of various sizes, some microscopic, consisting, apparently, of only one cell. These smallest ganglia lie close to, if not within, the adventitia, sending a fribrile to the media and one to the connective tissue cells in the immediate neighborhood, thus constituting a reflex arch in a way quite independent of the larger ganglia and the spinal cord (Kölliker), having what might be termed excito-motor functions and, it is not unreasonable to suppose, presiding over the life and nutrition of a given area of tissue; in other words, are minute trophic centers. They maintain a certain tone in the capillaries when chemical changes go on normally, like a mild continuous current, and, when the stimulus is increased, produce a dilatation of the vessels, *not* a contraction, as is noticed in muscle reflex.

This, in a way, explains the effect of cocaine, which is known to be a poison to all protoplasm, stopping metabolic changes, when injected, and so stopping the operation of this microscopic reflex arch, with the result that the tone producing and dilating influence of the vessel is lost and consequently a local ischemia is established, evidenced by the commonly observed blanching of the tissues and skin. Under such condition there is no record of chemi-

cal change made in the nervous center, no reflex; consequently no sensation of pain, or even consciousness of existence.

A group of these ganglia, again, have a reflex center in higher ganglia, and these in the spinal cord, thus opening the way for inhibitory influences and a general effect—the consciousness of well-being, or discomfort, or pain.

It should be remarked here, that the vaso-motor constrictors exercise this inhibitory function. But they are independent of what might be called the true vaso-motors and issue from the anterior spinal root, run directly, without branching or entering the ganglia, to their respective fields of operation.

If these facts be true, there is every reason for believing that the entire phenomenon of pain is created and conveyed in the sympathetic vaso-motor system, as suggested by Oppenheimer.

It is, unfortunately, impossible to prove this theory by actual experiment, since section of the vaso-motor fibers alone in the spinal nerve trunk is out of the question, and section of the *rami communicantes* very difficult surgically. Even if this latter could be accomplished, there would be no certainty that all fibers are cut, because many may run to higher or lower spinal ganglia and thus communication with the cord not completely severed. But a number of physiological, pathological and anatomical observations may be mentioned, which seem to uphold the theory.

The various organs and tissue vary greatly in their capacity for pain and may be divided into three large groups: first, such as are always without pain, whether their condition be normal or abnormal; second, such as are sensitive to pain in any condition of health or disease; and, third, such as are the seat of pain only during profound pathological processes in them.

On first thought it would seem as though the number of centripetal or sensory nerve fibers in a tissue must determine, in some degree, its capacity for pain. But there are tissues apparently well supplied with such nerves, which nevertheless rarely exhibit pain. For instance, the tendons are well supplied with sensory nerves, with special end organs, that probably have to do with what is termed muscle sense. Still, they are rarely the seat of pain. So lung tissue is richly supplied with nerves from the pulmonary and cardiac plexuses, and must also have many centripetal fibers controlling respiration, and yet the lung proper is never the seat of pain. Pneumonia runs its full course without pain, unless the pleura is involved. Absolutely painless tissues are such as

contain no nerves and, what is more important, no blood-vessels; for example, cartilage, nails, hair, and the like.

A study of the arrangement of the blood-vessels in various tissues may throw more light on this difference in sensitiveness to pain. In all glandular organs there is a net-like distribution of vessels immediately beneath the membrana propria, with which the epithelial cells are in direct contact, while in all other tissues the vessels branch off in all directions independently of one another in the connective tissue, until they become capillaries and again veins. In the former case they have nothing to do with nutrition of tissue—are not so well supplied by vaso-motor nerves and thus are rarely the seat of pain, while in the latter they have no other function but nutrition—are exceedingly well supplied with vaso-motors, and report any marked disturbance of that function as pain.

The lung belongs to the former class. In its alveolar structure excretion and secretion go on as if it were without epithelial intervention, and its capillary circulation is exactly like that of other glands.

All such tissues are not sensitive to pain. Catarrhal inflammation of mucous membranes are painless; so, too, parenchymatous nephritis, hepatitis, splenitis and adenitis.

Most sensitive to pain are the tissues that have a copious supply of blood-vessels in their connective tissue framework. They comprise the second class. This condition is most marked, therefore, in connective tissue enveloping special tissues, organs, bones, etc., like the periosteum, perimyseum, perineum, pleura and peritoneum. So we find that pain is invariably associated with inflammation of serous membranes, acute interstitial nephritis and perihepatitis, suppurating adenitis, periostitis and inflammatory rheumatism.

It would seem, then, that the question of whether a tissue can or cannot be painful depends on the vaso-motor nerve supply of its blood-vessels. Take, for example, bone, and its histology shows that the vessels entering the compact tissue lose their muscular coats, therefore have no vaso-motor nerves there. But the vessels of periosteum and marrow have them, are richly supplied with nerves and are sensitive, while compact bone is not. Periostitis and osteomyelitis are excruciatingly painful; caries is not.

It has been demonstrated (Sappey) that the nerves entering the lung with the pulmonary artery are distributed only to the vessels

of the bronchi, but no further. We know also that reflex nerve influences, which affect the blood pressure of the general arterial system, do not affect the pulmonary artery (Bradford). Only disturbances of respiration affect it; therefore no pain in pneumonia. True, pain is experienced in inflammation of the bronchi, but they are supplied by the bronchial artery.

The pain of neuralgia is rather difficult to account for on this plan, because it is impossible to see the entire course of the nerve and thus to determine whether or not it is associated with changes in the circulation. Romberg and other observers have seen varicosities in the smaller vessels of the neurilemma, and still other authorities insist outright that neuralgia is accompanied with hyperemia and that the location of this change is indicated by the pressure points.

It remains to consider briefly the connection of the entire vaso-motor system with the cord. As has been mentioned before, the vaso-constrictors issue with the motor root and, like motor nerves proper, run directly to the periphery without communicating with the spinal ganglia or any other. Neither do they ever convey the sense of pain, no matter how they are stimulated or irritated. The sympathetic vaso-motors issue by the posterior root with the sensory fibers and enter the spinal ganglia. Their fibers are described as being smaller than the sensory, and it is not certain whether they are always non-medulated or not, as both varieties have been seen in the connecting branches between ganglia. In the cord they can be traced to the anterior lateral ascending tract, but some fibers also pass to the anterior horn, and still others to higher or lower ganglion cells.

I may mention here that the condition known as syringomyelia is, in a way, an excellent proof of this theory. There is also on record a case of glioma of the posterior horn of the cord in the cervical region, which caused degeneration of fibers in the anterior lateral ascending tract as high up as the olivary body, and which produced during life a swelling of the left forearm with redness and complete loss of sensibility to pain, but only modified the sense of touch.

We have a right, therefore, to conclude that there must be some connection between these cells and the periphery other than the sensory nerves, and which may be the true conductors of pain.

But it must not be lost sight of that this is only the smallest portion of their function, if, indeed, it can be called a function at

all. Pain is a pathological phenomenon, and we have yet to find a single indication of any intention that any part of the economy is planned to do anything that is not strictly physiological and normal. It is, therefore, manifestly absurd to suppose that there is a special provision for the conversion of abnormal conditions into conscious experience. Pain was never intended to be a normal life experience, so pain nerves are not provided. Sensory nerves and nerves of special sense are intended solely for protection of the body from harm coming from without, and to put the mind into communication with the outer world, and this was not intended to be painful.

But everyone will admit that there is such a thing as a general sense of existence, a consciousness of living, of being well, which, modified, becomes a feeling of discomfort, whose superlative is pain and which may be independent of the operation of any or all the special senses. That this is due to cell metabolism, or the state of activity, nutrition and health, of the individual tissue cell. Life activity creates that general feeling of strength and pleasure known to those who work, but which becomes fatigue, discomfort and pain, too well known to those who overwork and abuse all or any special part of that "wonderfully and fearfully made" empire of the will—the human body.

CARE AND TREATMENT OF OLD PEOPLE.[1]

By SAMUEL G. DORR, M. D., Buffalo.

THERE are several important practical considerations connected with age, be it either youth, infancy or old age. I will speak, however, of old age—that time beyond fifty.

As our bodies approach close to this half-century mark, congestion and slow degeneration of the tissues of important organs take the place of inflammation. After fifty, the body begins to show signs of loss of power and sluggishness of function, which is but the prelude to that sure, although it may be slow, decay, the progress of which is indicated by diminished sensibility, impaired memory, muscular weakness, scanty secretions, calculous affections, osseous deposits and organic visceral conditions. The death-rate statistics show that at fifty-five, three-fourths of the population have passed from the face of the earth. During the next thirty

1. Read before the Medical Union, June 20, 1893.

years, which is the period of life from fifty-five to eighty-five, there is a death-rate of twenty-three in a hundred, and this leaves just two out of a hundred who live beyond eighty-five years. A strange fact comes in here, and that is that the middle ten years of this last-mentioned thirty years, which is the period from sixty-five to seventy-five, is most fatal.

In fevers of old people, the mortality is five times greater at sixty than it is at ten, and four times greater than it is at twenty years of age. Under Care and Treatment of Old People comes the consideration of two very distinct classifications. First, that peculiar to the individual, such as heredity, diathesis, temperament, sex, age, and the like. Second, those things external to the individual and constituting the environment, like air and climate, place of abode, food, water, occupation, habits and mode of life. In these last things the doctor who treats and cares for old people must find his success, if he finds any success at all. Medicines and prescriptions will avail but little in lengthening life beyond the average where the environment and habits of the patient are wrong.

It has seemed to me that the atmosphere, with its heat and cold, its dampness and dryness, its dust, smoke and other conditions, has on the patient a power for good and evil little thought of by our general practitioner.

To advise removal from one state to another is not always possible, but to advise removal from one room to another, and being in the right heat and circulation of air, will always be practicable. When we contemplate the large amount of surface exposed by our bodies to the air and atmospheric conditions, we will at once recognise the importance of proper conditions, such as purity, temperature, humidity, and the like. The respiratory organs and air passages, made up as they are of nose, throat, larynx, trachia, bronchial tubes, bronchioles and air vesicles, about which is looped and massed the capillaries of the pulmonary circulation involving the action of the right side of the heart and the aeration of the blood, we are, at least, interested; but when we calculate the effect of atmospheric changes on the skin, that great organ in which we must live, with its glands and nerves, and its capillaries, forming a large section of the terminating loops of the circulation from the left side of the heart, we must be convinced of the importance to longevity of proper atmospheric conditions.

The skin and the lungs do not degenerate and give out purely

by reason of age, as do the eyes, the ears, the teeth and the circulatory system; therefore, if the being were never exposed to anything but pure air in a perfect climate, these organs would remain useful far beyond the average limit of life. If good air is conducive to length of life, the place of abode is proven to be a valuable factor in treatment.

Food and water, like the air we breathe, must be suited to our wants. We cannot dismiss these by saying they must be pure food and pure water. The fact is, they must be adapted to the wants of the patient, the same as medicinal substances. They may in the past have produced disease in the patient, although quite pure. The term pure cannot be made applicable to food and water, as many patients would be improved by water which contained some foreign substance; or food having that which is required by the body for its preservation. While we look for pure air, we must not look for pure water and pure food alone, but rather we must look for the water and food to contain that which is required by our patients.

In the aged, the teeth are frequently absent and the stomach is weak, hence difficulty in mastication and digestion; and with digestive difficulties come a large number of other difficulties. When the old, weak stomach is given too large or too difficult a task to perform, the sympathetic system of nerves is deranged fearfully, and life is frequently cut short by apoplexy or acute disease. When too large an amount of food or improper food is put into the stomach, too much for perfect digestion, there must be produced a vicious product in the system as a result. If the body, by reason of age, is unable to digest freely and perfectly a given amount of food, it is quite reasonable to suppose that the elimination of these vicious products would, by reason of the same age and consequent weakness, be very much delayed. For the above reason, it seems to me that elimination by all the organs of the body, not forgetting the skin, is quite imperative.

So far as water and liquids are concerned, I find myself forced to the conclusion that far too much is contained in the average individual. The circulatory system is under too great a strain, by reason of its fulness. Every pulsation of the heart produces an over-strain, and the elasticity of all the vessels composing the circulatory system is too early in life destroyed through mechanical effect, produced by a too large volume of blood in front of each pulsation.

Next in order mentioned comes occupation, and if food and water must be adapted to the wants of our patients, none the less must their occupation be suited to their peculiarities; and it is not to be forgotten that aged people are quite likely to have peculiarities. There are those deep thinkers, like Gladstone, Bismarck and others, who must have hard mental work late in life. Reasonably protracted muscular work will bring sleep and act as a sedative very refreshing to nature. A perfectly selected occupation becomes an amusement which engrosses all attention and distracts all thoughts from other subjects. A few minds and a few bodies have to lie inert, they being worn to exhaustion. I recollect how intelligent was the mind of Mrs. Fillmore at the age of 106, when the body was weakened to that extent which prevented largely the use of the extremities. In her we have the example of the possibility of the brain outlasting the muscle, if cared for. Occupation of the muscles and the mind suited to the individual is conducive to longevity, while occupation unsuited to the individual is the reverse.

Habit, that wonderful plan of our nature, which is but the repetition of sensations, thoughts or movements, which are at first distinct, and may have been difficult, although voluntary, at last transfers us from the domain of attention to the domain of association; and when the influence of association becomes predominant, as it will in most characters after long years of repetition, then the individual is a slave to habit. *He can no longer enjoy new sensations, new thoughts or new movements.* Every year of our lives places the yoke of habit more heavily upon our necks. The lives of old people are frequently cut short by habits which are persisted in with a full knowledge of their dangerous effect. Of all things on this earth and under the heavens, so far as the knowledge of man goes, habit is the most powerful influence for good or for bad which affects advanced life.

Old age and bad habits do not go together. Old age can only be to them who have no bad habits, or who have sense and will sufficient to correct them; or who as perpetual youths have never let their sensations, thoughts or movements run in the rut of association, but have always held them under their attention and subject to the dictates of a wise judgment.

When your patient cannot resist a dangerous habit, and when there is no help or influence in the family of the patient to assist him or her to resist that which leads to destruction, then, as medi-

cal men, you may enter a prognosis of failure in your attempt to lengthen life beyond the average. There is no occasion for me to mention a long list of bad habits in this paper, but, as a fact of personal observation in my practice, I have to state that coffee, beer and tobacco are sending to the grave a fearful amount of people who are too young to die by natural causes.

Habits of one kind or another are in constant warfare upon every organ or system of our anatomies. The divine teachers tell us that habit carries her victories beyond this terrestrial sphere and destroys the soul, thus robbing us of both the future and the present. Some writer has said that the length of life is the duration of our arteries; and, as I think more and more on this assertion, I am impressed with its implied truth. The pulsations of the heart is the water hammer, which, by repeated blows, finally destroys the structure, thus constituting the physiological duration of our existence.

The heart must beat, and these beats are caused to deviate more or less from the standard of perfection by mode of life and habits of the individual. The heart, like the skin, brain and lungs, escapes the failure due purely to advanced age. The nutrition of the heart is especially provided for, and you always find the normal heart of old people hypertrophied. Some writers have made the error of stating this proposition in the light that old people have attained to old age by reason of having been possessed of strong hearts. The hypertrophy of the heart is physiological, whereas the alterations in the arterial coats whereby they lose their elasticity is pathological, and may, and may not, be the cause of the hypertrophy and dilatation in the heart.

There is so much to be said on this subject that it is best to stop all except very practical questions in this paper. Over-indulgence in food induces plethora, corpulence and loads the tissues with fat, which is a most dangerous condition for old people. Gluttony and the abuse of stimulants sends many to the grave. Prolonged exertion, violent emotions, petty troubles are daily causes of death. Gouty conditions and irregularity of heart's action are difficulties arising largely from faulty nutrition and defective elimination. The food of old patients with irregular heart's action had better be strictly regulated and persistently adhered to. I would recommend for breakfast, dry toast, a cup of tea with cream and sugar, and nothing else. For dinner, a little lean mutton, or chicken, or fish, dry toast, but no vegetables; a

little brandy, tea or hot water. For supper, dry toast, fish boiled, tea or hot water. At bedtime, four or five ounces of hot water. This diet is for extreme cases of heart weakness, and when associciated with proper medicinal agents will seldom fail in its purpose.

The hasty conclusion of this paper has been brought on by the feeling that it is now too long.

300 JEFFERSON STREET.

ABUSE AND USE OF ATROPIA IN EYE TREATMENT.

BY RICHARD H. SATTERLEE, M. D., Buffalo, N. Y.

I HAVE recently had two cases which are instructive as being so typical of what often comes to the oculist that I would like to call the attention of the profession to them.

CASE I. Mr. B. gives the following history: he noticed his sight failing gradually for about six months, then he consulted his family physician. The physician examined his eyes superficially and used a solution of atropia. The patient was blind instantly. The sight partially returned in two days, when atropia was used again, and this time the sight did not return. I saw the case later and found glaucoma present in both eyes. I operated, but there was only slight improvement of vision.

CASE II. I have under my care, at present, a woman about thirty years of age, who had an attack of rheumatic iritis two years ago. She was under the care of her family physician during this attack, whose whole treatment consisted of confinement in a dark room for three months, and weak solutions of nitrate of silver and sulphate of zinc dropped in the eyes three or four times daily. On examination, I found the iris of both eyes bound down so firmly by posterior synechia that no mydriatic had any appreciable effect. She has asthenopia that glasses will only partially relieve. The synechia has interfered with the nutrition of the lens, and it is only a question of a short time when she will have cataracts in both eyes.

In case I. the sulphate of atropia was positively contraindicated, for the angle of filtration was already partially closed, and dilatation of the iris completed the closure, greatly increasing the pressure inside the eye, and thus doing still further injury to the optic nerve. There was no redness of the conjunctiva, nor discoloring of the iris, indicating a need of any mydriatic. The indiscriminate use of atropia is dangerous, for it must be remembered that glaucoma may occur at almost any age after puberty and, fol-

lowing injury, even younger, I myself having had a case, four years ago, of glaucoma in a boy nine years old.

In case II. the symptoms all pointed to the need of atropia of sufficient strength to produce dilatation of the iris and so avoid, if possible, the formation of synechia. Synechia will sometimes form in spite of all treatment, but atropia rather tends to hinder the formation, by bringing the iris to a state of rest and thus lessening the inflammation.

189 DELAWARE AVENUE.

Progress in Medical Science.

OPHTHALMOLOGY.

BY ALVIN A. HUBBELL, M. D.,
Professor of ophthalmology and otology in the Medical Department of Niagara University, etc.

TREATMENT OF DETACHMENT OF THE RETINA.

DR. TERSON, of Toulouse, is of the opinion that electrolysis, at present, appears to be the best method of treating detachment of the retina. Some practitioners are in the habit of adapting to this affection the measures resorted to for the cure of hydrocele, introducing simultaneously into the eye two needles connected with the opposite poles of an uninterrupted current battery (bipolar electrolysis, Schoeler). Others, as in the treatment of aneurisms and nævi, introduce into the eye a single needle, connected with the positive pole (positive electrolysis, Abadie, Gillet de Grandmont). Others, again, introduce a needle connected with the negative pole (negative electrolysis, Van Moll).

The positive pole is the one that should be introduced into the eye, in order to let the wound close as rapidly as possible, so as to prevent the vitreus from escaping, on the same principle as positive electrolysis is to be preferred in the cure of aneurisms, in order to obviate secondary hemorrhage. In addition, electrodes must be used which are not attacked by the products of electrolysis, and which, on the other hand, are sufficiently rigid to penetrate the sclerotic of a hypnotic eye presenting detachment of the retina. The only substance which fulfils these conditions, being at the same time remarkably easy to asepticise, is iridised platinum. The only drawback is that this alloy does not take the bright polish which facilitates penetration into the eye.

The author uses positive electrolysis, the capital point in which is to measure the strength of the current by means of a very sensitive galvanometer without oscillation. He has succeeded by this means in keeping up a constant current of five milliamperes during the whole time the application lasted, which did not exceed one minute.

Since July, 1894, the author has used this method seventeen times in operating for the relief of detachment of the retina among nearly 1,700 patients under his observation. Of these, five have been operated upon so recently that it is impossible to form an estimate of the result. In the other twelve cases of detachment, all of which were of a very serious nature, there was aggravation in one, dating from nearly three years, no effect in two, ephemeral improvement in three, improvement persisting in a very promising manner in five, and, lastly, in one, immediate recovery, which has now been maintained during nine months, and which must be attributed solely to the intervention, seeing that this was the only treatment that had ever been applied.

The patient in the last case was a woman, thirty-eight years of age, who for a week had presented extensive myopic detachment of the retina of the right eye, involving rather more than one-third of the membrane in the infero-external region, associated with general disturbances in the vitreus, abnormal depth of the anterior chamber and considerable weakening of the pupillary reflex. Only a very slight perception of light remained in the non-detached portions of the retina; there was well-marked hypotonus. Forty-eight hours after the application of positive electrolysis, with a current of 5½ milliamperes during one minute, the vitrous resumed its transparency and the retina was reattached everywhere, leaving old spots of disseminated choroidal atrophy visible, with lesions of the macula. Vision, which before was almost *nil*, had increased to $\frac{1}{10}$ with a correcting lens of —12D. The visual field had become normal. This result has been fully maintained for nine months. These facts seem to justify the following conclusions:

1. Positive electrolysis should be resorted to in recent cases of detachment of the retina, and is the more likely to be successful the sooner after the initial symptoms it is undertaken.

2. This method of treatment does not in the least interfere with recourse to various medical measures, suggested by lesions of diathetic origin, which a long experience has proved to possess

considerable palliative value.—*The Medical Week* (Paris), May 17, 1895.

OPERATION FOR SECONDARY CATARACT.

Dr. Wicherkiewicz, of Posen, holds that there are two varieties of secondary cataract—namely, a membranous form, complicated by iridal synechia; the simple form, consisting merely in the thickening of the capsule of the lens without iridal adhesions. In the first case, when the pupil is not entirely obstructed, attempts should first be made to extract the entire membrane, with the help of a pair of forceps, through a small peripheral incision in the cornea. If this maneuver does not immediately succeed, care must be taken not to pull too hard, recourse being had in such cases, as when the pupil is completely obstructed, to iridotomy, a medium triangular incision being made into the iris with a pair of de Wecker's scissors. In the second category, that is to say, in simple secondary cataract, discission is sufficient; but, in order to prevent all chance of infection, the puncture should be made, not into the transparent cornea, but into the peripheral portion of the cornea, in the scleral limbus, at a distance of one millimeter from the iris, a Knapp's knife being used for the purpose. The author proposes to describe this operation as scleronyxis anterior.—*The Medical Week* (Paris), May 17, 1895.

ON THE RELATION OF RETINITIS ALBUMINURICA TO THE INDUCTION OF PREMATURE LABOR.

Mr. Simeon Snell, of Sheffield, has read a short paper before the North of England Obstetrical and Gynecological Society, in which he defended the practice of inducing premature labor in certain cases of albuminuric retinitis. He says:

The seriousness of the renal complication is increased by the sight-failure, which is present in a certain number of cases. The association of retinitis with Bright's disease is indicative of a very limited period of life, frequently only months. With the albuminuria of pregnancy the retinitis is of less grave import in this respect, but, as far as vision is concerned, it is attended with very serious results. Dr. Culbertson has collected the cases of albuminuric retinitis which have been recorded, and finds that 23.33 per cent. have terminated in blindness, 58.25 have resulted in only partial recovery of sight, and but 18.54 have recovered sight. Silex, who has followed twenty-six patients for a long period, gave the following results: Eleven recovered vision

above one-sixth, ten below this, and five were nearly blind, this being due to optic atrophy, choroido-retinitis and detached retina, which showed itself late in two cases.

The retinal affection may show itself at almost any period of pregnancy, and infrequently during the first three months. The appearances in the fundus are generally well pronounced. The margins of the optic discs may be hazy and ill-defined; numerous white patches in the macular region, with some hemorrhages, may all be observed. In other cases blindness or great impairment of sight may be present, with an absence of ophthalmoscopic signs. In a case recently, which Mr. Richard Favell kindly allowed me to examine, and in which labor was induced for eclampsia at term or nearly so, the young woman was apparently quite blind, but yet there was an absence of ophthalmoscopic signs. On the other hand, the gravity of the retinal affection, as shown by the changes in the fundus, is not always commensurate with the defective vision complained of by the patient, and for this reason it is desirable that pregnant women, with albumen in their urine, should at intervals undergo ophthalmoscopic examination. The gravity of the complication has been sufficiently dealt with.

It has frequently been found that when labor terminates, improvement in sight is apparent, and in this way the induction of abortion came to be advocated. Excellent results have followed its adoption. It has been called for occasionally in the author's own practice.

Mr. Snell concludes as follows:

1. For retinitis, appearing before or about the sixth month, induction of labor should be recommended.

2. That when it shows itself only in the last few weeks it may often be unnecessary, but that each case must be judged by the severity of the affection.

3. That a case in which retinitis has shown itself in one pregnancy should be carefully watched both as to the presence of albumin in the urine and as to the eye-affection, and treatment adopted accordingly.—*British Medical Journal*, June 22, 1895.

THE PARALLAX TEST FOR HETEROPHORIA.

Dr. D. A. Duane, of New York, says, that having used this test for eight years, and upon a great number of cases, he is thoroughly convinced of its utility and desires to recommend it to those who busy themselves with the consideration of anomalies of the ocular muscles.

To conduct this test he places the patient in the primary position, with head erect and eyes directed straight forward or slightly below the horizontal plane (this latter especially in making the

test for near points). The object of fixation, which should be twenty feet distant, may be a candle flame, but preferably is a white spot 1 or 2 cm. in diameter, upon a dull black surface of some considerable extent. By this arrangement all danger of projecting the image upon a surface beyond is done away with, and the chance of confusion with surrounding objects is prevented. The patient's gaze being directed fixedly at the spot, a card is placed before one eye and passed alternately from that to the other—the patient being at the same time asked whether the spot appears to move, and, if so, in what direction. If it remains perfectly stationary there can have been no deviation behind the card, and the position of fixation of both eyes is perfect. If, however, the spot moves, it must occupy a different position as seen by the two eyes, *i. e.*, there is really a diplopia present which our method of observation has unmasked. Thus, if, on uncovering the left eye, the object (which was previously seen by the right eye and is now seen by the left) appears to move to the patient's left, there is really a homonymous diplopia (homonymous parallax), which differs from ordinary diplopia only in the fact that the two images are seen alternately instead of at the same time; if the object seems to move to the right, there is crossed diplopia (crossed parallax); if the object moves down, the eye must have been higher behind the screen (left hyperphoria, left parallax); and if the object moves up, the left eye must have been lower behind the screen (right hyperphoria, right parallax). In order to determine the amount of this alternate diplopia, he places prisms of the appropriate direction and strength before one eye until the movement is abolished. Thus, supposing that when the left eye was uncovered, the object seemed to move down and to the left, (homonymous and left parallax, indicating a condition of hyperesophoria,) two prisms are placed before this eye, with their bases respectively down and out, and increased in strength until the movement has become *nil*. The strength of the prism having its base down will measure the degree of hyperphoria, and that of the prism having its base out will indicate the degree of esophoria present.

For near points the test is made in the same way, a small dot on a rather large card being employed, and the movement of the dot upon the card (and not of the card itself projected against some distant object) being observed.

Of any test thus put forward it must be asked how far it fulfils the requirements of applicability, precision, accuracy and util-

ity. As regards the first requirement, he says that in his hands the test has proved to be almost universally applicable.

As regards precision, the test leaves nothing to be desired. A prism of $\frac{1}{2}°$ suffices to produce or to neutralize quite a decided lateral parallax; and a vertical movement, corrected by a prism of even $\frac{1}{8}°$, is clearly noticeable.

As regards accuracy, he has become convinced from the constancy of the results which the method affords, that it is one of the most reliable of all that we have at our command. And this, in fact, constitutes its reason for existence.—*Archives of Ophthalmology*, Vol. XXIV., No. 2, 1895.

MASSAGE OF THE EYE.

Dr. Parenteau, of Paris, holds that massage of the eye and its appendages constitute a method of treatment which is worthy of being tried and applied in a large number of affections.

Maneuvers forcible enough to determine traumatism may be beneficial in lesions of the eyelids, such as cysts, chalazion, engorgements, and the like.

In ocular affections, properly so-called, he regards them as too dangerous.

Massage with medicinal substances possesses the double advantage of assisting the penetration into the eye of the ointments or powders introduced under or applied to the surface of the lids, and of bringing about a quicker subsidence of the congestion of the eye and its envelopes. It is especially indicated in phlyctenular kerato-conjunctivitis, corneal leucomata, iritis, episcleritis and irido-choroiditis.

Simple massage, executed with the aid of the fingers or special instruments, without the addition of drugs, is called for whenever there is a muscular lesion of peripheral origin, or vascular disturbances. Massage is contra-indicated in progressive myopia of high degree, considerable hypotonus and incipient opacity of the crystalline lens.

The *modus operandi* varies from slight touch to strong pressure, and includes also percussion of the tendons, in affections involving the muscles of the eye. The motion should be radial and circular in corneal or iridal lesions, longitudinal in muscular lesions and vertical in episcleritis and irido-choroiditis.—*The Medical Week*, May 24, 1895.

PHYSIOLOGICAL CHEMISTRY.

CONDUCTED BY JOHN A. MILLER, PH. D., ASSISTED BY F. H. MILLS, M. D.

SUGAR IN THE BLOOD AFTER BLEEDING.

F. SCHENCK (*Jour. Chem. Soc.*, 1895 ; *Pflüger's Archiv.*, 1894). Claude Bernard originally stated that loss of blood caused a rise of sugar in the residual blood. This was confirmed by v. Mering and also in the present research, where a new method was employed. The rise of sugar begins immediately after bleeding, but cannot be recognised a few hours after. The source of the sugar is apparently the liver, as the rise does not occur if the liver is cut off from the circulation. It is more marked when ammonium carbonate is given, this drug stimulating glycogenesis, and is diminished by glycenol, which inhibits the change of glycogen into sugar.

PERCENTAGE OF IRON IN THE LIVER IN ANKYLOSTOMIASIS.

B. RAKE (*J. Pathol. and Bacteriol.*, 1894 ; *J. Chem. Soc.*, 1895). The percentage of iron in liver and spleen in five cases of disease, due to the presence of the worm *ankylostoma duodenale*, is given. The interest of such an investigation arises from the fact that the symptoms produced are very like those of pernicious anemia.

The average percentage of iron in the liver is less than in other diseases, and much less than in pernicious anemia ; thus : ankylostomiasis, 0.1 ; other diseases, 0.12 ; pernicious anemia, 0.7. The iron in the spleen is scarcely affected.

The intense anemia associated with the disease is simply due to loss of blood from the intestine, and is not caused by any toxic substance causing blood destruction in the liver.

BACTERICIDAL ACTION OF LIGHT AND AIR.

R. F. D'ARCY and W. B. HARDY (*J. Physiol.*, 1894 ; *J. Chem. Soc.*, 1895). Marshall Ward has shown that the bactericidal power of light is a peculiar property of light of short wave length, and is at its maximum at the violet end of the blue. This is only manifested in the presence of oxygen, and Wnerster has shown that "active oxygen" is produced when evaporation takes place in direct sunlight. The present experiments show that when the spectrum of a powerful arc light is allowed to fall on a moist surface in the presence of a delicate indicator, oxidation occurs, and

the action commences at the blue end of the green and continues through the blue, violet and ultra-violet regions.

EFFECT OF SUNLIGHT ON TETANUS CULTURES.

F F. Wesbrook (*J. Pathol. and Bacteriol.; J. Chem. Soc.*, 1895). The experiments confirm other observers in the conclusions that oxygen is a necessary factor in the destruction of bacteria by light. Without oxygen sunlight is powerless.

CONTENTS OF THE HEALTHY STOMACH.

A. L. Gillespie (Rep. of Lab. R. C. P., Edin., 1894; *J. Chem. Soc.*, 1895). The following conclusions are drawn from the examination of the contents of the healthy stomach: (1) Free hydrochloric acid is secreted immediately the food enters; but this combines with proteïd, so that salivary action is not impeded during the first stage. The free acid does not appear in the stomach contents till from half an hour to two or three hours after the meal is taken; the time varies according to the composition of the meal. Hydrochloric acid combined with proteïd is less antiseptic than the free acid. The inorganic salts, especially the chlorides, and the total proteïds per cent. in solution fall during the progress of digestion. Albumin increases, albumoses remain stationary and peptone diminishes.

Physiological text-books are stated to be in error concerning the amount of acid. The following numbers are derived from the present observation: total acidity, from 0.108 to 0.36 per cent.; combined acidity, from 0.072 to 0.324 per cent.; free acidity, 0.018 to 0.09 per cent.

The causes of variation are the time after the ingestion of a meal and the character of the food taken. The free hydrochloric acid is seldom over 0.09 per cent. after a proteïd meal, but it may rise to 0.162 or 0.27 after a meal chiefly carbohydrate in nature.

INFLUENCE OF FAT ON THE ASSIMILATION OF PROTEÏDS.

R. Laas (*Zeit. Physiol. Chem.*, 1894; *J. Chem. Soc.*, 1895). The admixture of fat with proteïd food increases the nutritive value of the latter, more nitrogenous matter being assimilated. Fats, however, unlike carbohydrates, do not lessen the putrefactive changes in proteïds in the alimentary canal.

INFLUENCE OF CARBON DIOXIDE AND OXYGEN ON BLOOD COAGULATION.

A. E. WRIGHT (*Proc. Roy. Soc.*, 1894 ; *J. Chem. Soc.*, 1895). The method used consisted in determining, by means of samples of blood withdrawn into capillary tubes, the alterations in the coagulability of the blood by altering the gaseous intake of living animals (dogs and rabbits). Increase of carbon dioxide increases the rate of coagulation. The same is true for human blood in cases of hemophilia. Diminution of the carbon dioxide decreases the coagulability to the original normal. Decrease and increase of oxygen cause respectively decrease and increase of coagulability.

CHANGES IN LIVER CELLS.

T. L. BRUNTON and S. DELÉPINE (*Proc. Roy. Soc.*, 1894 ; *J. Chem. Soc.*, 1895). Various drugs were given to rabbits and the effect on the liver cells noted. The compounds studied may be subdivided into three groups : (1) stimulating or excito-secretory, with pilocarpine for a type ; (2) neutral ; and (3) depresso-secretory, with atropine for a type. To the first group belong toluene, benzene, sodium iodide, pilocarpine, chrysophanic acid, ammonium chloride, methatolylenediamine and nitric acid ; to the second, aniline and phenol ; to the third, phenol, atropine and ammonia. The following caused marked increase in glycogen : sodium iodide, methatolylenediamine, chrysophanic acid, toluene (?), ammonium chloride (?). The following did not do so, sometimes even causing a diminution of hepatic glycogen : nitric acid, pilocarpine, benzene and ammonium chloride (?). The following caused a marked diminution in the "free iron" in the liver : sodium iodide, toluene, methatolylenediamine. The following caused a diminution of the "free iron," but in a less marked degree : ammonium chloride, nitric acid, pilocarpine, benzene (in the fed liver) ; in the fasting liver benzene causes a doubtful increase of iron. Ammonia causes a diminution of glycogen and an increase of iron. Atropine causes a slight diminution of glycogen and little change in the iron.

ALBUMINURIA.

F. D. BOYD (Rep. of Lab. R. C. P., Edin., 1894 ; *J. Chem. Soc.*, 1895). The total proteïds were estimated by boiling, the albumin by boiling after removal of the globulin by half saturation with ammonium sulphate, the globulin by difference.

Both proteïds are generally present; the proportion varies so much that it is not possible to diagnose the variety of kidney disease present by means of it. Even in amyloid degeneration the globulin may not be in excess. In the albuminuria of pregnancy the globulin is present in larger amounts than in other forms of albuminuria. In the albuminuria of heart disease the globulin is usually more abundant than in chronic interstitial nephritis. In acute nephritis, without hematuria, the two proteïds are about equal; but when blood is present, the globulin is proportionally more abundant.

Four cases of Bright's disease are recorded in which serum albumin was present, but serum globulin absent, or present only in the merest traces; and one case where globulin and albumoses were present, but albumin absent. In no case did the proteïd quotient bear any relation to that of the blood. The amount of proteïd is often greater than that found in transudations. From these considerations the presence of proteïd in the urine is considered to be due to secretion rather than transudation, and there is some evidence that the lower the state of nutrition of the renal epithelium, the greater is the amount of globulin allowed to pass.

The urine secreted by the Malpighian tufts is by many physiologists regarded as albuminous. The albumin is considered to be reabsorbed as the urine passes along the renal tubules in the normal condition. Posner took pieces of the kidney and plunged them into boiling water for two or three minutes; sections were then prepared. Where albuminuria had been present the microscope revealed coagulated masses of proteïd in the capsule chambers and tubules, but when the healthy kidney, either of man or animals, was examined, no such evidence of albumin was ever found.

PEDIATRICS.

By MAUDE J. FRYE, M. D.,

Clinical Instructor in diseases of children, Medical Department, University of Buffalo.

SUMMER DIARRHEAS IN INFANTS.

Allyn (*University Med. Magazine*, July, 1895,) concludes the summer diarrheas of infants are, primarily, instances of poisoning, the poisons being developed in the food, especially milk, or introduced into the stomach and bowels in some other way.

Apart from the decomposition of food, the most important factors contributing to their fatality are high temperature, a bad sanitary condition of the district, uncleanliness of the house and of its occupants, and immorality of the parents or guardians.

The occurrence of these cases should be foreseen in winter and early spring, and efforts made to secure better living quarters, and the highest degree possible of nutrition and health in the infants.

The most desirable thing is a trustworthy source of fresh milk supply. In the absence of the milk laboratories of Boston and New York, it is the personal duty of the physician to look carefully after the milk supplied to nursing infants. In young infants that have to be artificially fed I have had the best result with peptonised milk.

No infants should pass the summer in the city if they can be removed to the country under fairly good surroundings. This should be done as a precaution before July and before they are ill. If summer diarrhea develops, removal to a cooler place, where fresh milk can be had, should be accomplished as soon as possible.

RATIONAL THERAPEUTICS OF CHOLERA INFANTUM.

BLECH (*N. Y. Medical Journal*, March 2, 1895,) says prohibit all food, even the breast, for the first day. Wash out the stomach, unless the patient is too low, using hydrozone one-half ounce to sterilised water one pint. Repeat if necessary. Irrigate the bowels in every case, using hydrozone, ℥ii. to each quart of cold sterilised water. Repeat irrigations, if necessary, every two hours. Use morphine and strychnine, hypodermically, when indicated. Use alcohol spongings if irrigations fail to lower the temperature. Sweet, strong Russian tea is allowed the second twenty-four hours.

QUININE IN PERTUSSIS.

FISCHER (*N. Y. Medical Journal*, LXI., 19,) gives quinine three times a day, one centigram for the month, one decigram for the year, of each patient, using the muriate or sulphate. From twenty-seven cases he concludes it diminishes the number of attacks essentially in five days at the latest. It reduces even the most vehement whooping-cough to a mild bronchitis in twelve to

fifteen days. It influences most favorably a possibly existing pneumonia. It often stimulates the appetite.

ALCOHOL IN SICK CHILDREN.

SEIBERT (*Archives of Pediatrics*, XII., 5,) condemns its use in gastro-intestinal disorders, and even in typhoid, except in emergencies. Alcohol-fed pneumonic children convalesce more slowly than others treated without it, therefore he does not give it here except in threatened or actual collapse. In scarlatina he limits its use to an occasional dose of light wine or whisky in septic conditions induced by absorption from pharyngeal necrotic tissue. In malignant cases he has never seen the slightest good from its use. In diphtheria he uses it in large doses in heart weakness, though doubting its value. He believes that the amount given to sick children is, as a rule, in direct proportion to the physician's ignorance of the proper dietetic and hygienic management of the case.

ADENOID GROWTHS IN CHILDREN.

EUSTACE SMITH, (*Lancet*, May 25, 1895,) says naso-pharyngeal adenoid growths are common in infancy as well as in childhood. They may even be present at birth. At this early age it is uncommon for them to give rise to the ordinary symptoms of nasal obstruction. Such growths should always be suspected if the infant's nose be broad at the bridge and faintly dimpled on each side at the upper border of the inferior lateral cartilage, and especially if there be noticed any retraction in the inferior region of the thorax. Persistent snuffling in infants is no sign of syphilis in the absence of other symptoms, but rather of adenoids.

TREATMENT OF CROUP BY CALOMEL SUBLIMATION.

FRUITNIGHT (*Archives of Pediatrics*, XII., 6,) says this treatment is indicated when the symptoms show increasing laryngeal stenosis. The method of treatment is empirical and not deductive. In the average case the dose is fifteen grains, repeated hourly. The patient is kept in the vapor-saturated atmosphere for a period varying from ten minutes to half an hour, according to the gravity of the symptoms. The treatment is continued from one to twelve

days, as indicated by the persistence of laryngeal obstruction. The evil consequences to be guarded against are salivation, diarrhea, and especially depression and prostration, accompanied by anemia. In over one hundred patients subjected to this method of treatment the writer has observed no case in which deleterious effects have attended or followed it. Calomel sublimation should be practised even though intubation has been done. In applying the remedy the chief principle is, that the vapor must not be dissipated throughout a large extent of atmosphere. The author mentions three pregnant women who persisted in inhaling the vapor of the calomel. In each abortion resulted.

STATE MEDICINE, PUBLIC HEALTH, HYGIENE AND BACTERIOLOGY.

Conducted by ERNEST WENDE, M. D.,
Health Commissioner of the City of Buffalo, N. Y.

A Study in Vital Statistics.

By FRANKLIN C. GRAM, M. D., Registrar.

AN EXAMINATION of the statistics filed with the health department of Buffalo is always of deep interest. I have summarised a few of the principal ones for the first seven months of the current year, and for the sake of study have compared them with those of the same months for last year.

One of the first and most interesting features to note is the fact that the death-rate is still diminishing, notwithstanding the fact that this city is growing rapidly. In 1891, when the population of Buffalo was 255,664, there were 6,001 deaths, making the rate 23.48 per 1,000; in 1892 the rate was lowered to 19.98, in 1893 to 19.03, and in 1894 to 16.76. At the rate we are going this will be considerably lowered in 1895, unless the unexpected happens.

The following table gives some of the figures in which the medical profession is mostly interested:

	Total Deaths.	Rate per 1,000.	Under five Years.	Deaths from Communicable Diseases.	Cholera infantum.	Consumption.	Diphtheria Reported.	Diphtheria Deaths.	Scarlet Fever Reported.	Scarlet Fever Deaths.	Typhoid Reported.	Typhoid Deaths.	Measles Reported.	Measles Deaths.
January, 1894	409	16 36	132	99	1	39	50	13	105	16	12	2	14	2
January, 1895	372	14 17	149	120	1	44	77	32	78	2	26	5	74	1
February, 1894	398	15.92	140	86	3	27	33	9	85	10	11	8	13	1
February, 1895	409	15.58	149	100	1	40	48	15	58	3	15	3	220	6
March, 1894	441	17 64	153	146	2	49	37	10	72	8	510	45	7	. .
March, 1895	416	15 84	151	106	.	36	58	17	37	2	6	6	614	10
April, 1894	434	17.36	127	107	1	44	14	10	64	7	69	17	11	. .
April, 1895	351	13 37	135	102	2	37	43	10	28	4	9	5	722	23
May, 1894	430	17 53	168	118	2	49	21	11	67	12	33	13	8	1
May, 1895	368	14.01	148	99	1	31	39	6	15	3	5	4	366	33
June, 1894	391	15 64	140	95	11	38	18	6	68	11	15	11	11	. .
June, 1895	354	13 46	152	112	27	44	48	10	27	1	11	2	124	18
July, 1894	575	21.90	331	253	160	43	18	10	51	10	13	6	6	1
July, 1895	534	19 08	312	239	163	52	47	13	16	. .	10	2	19	5
Totals, 1894	3078	. . .	1211	904	180	289	191	69	412	74	663	102	70	5
Totals, 1895	2804	. . .	1196	878	195	284	360	103	259	15	82	27	2139	96

It will be seen that during the first seven months the death record is 274 in favor of 1895, and that the number of deaths of children, under five years, has also diminished. But the ratio of infant mortality to that of adults is still too large, and this subject alone is worthy of serious consideration. Likewise, there will be noticed a decrease in the number of deaths from communicable diseases, although there is some difference in cholera infantum. The death-rate from consumption is remarkably close to that of last year when numbers are considered. Although the percentage in the total number of deaths is greater, yet the rate per 1,000 of population is much smaller when we consider the city's growth. The medical profession is deeply interested in the next two columns, showing the number of cases of diphtheria reported and the proportion of deaths from the same. The assistance which the department gives the profession by making microscopical examinations in suspected cases, has had a tendency to make the reports more accurate and also to indicate the true state of affairs at an early stage of the illness. How much of the decrease in the death-rate from this disease is due to the use of antitoxin cannot be definitely stated, but from the reports received from practitioners at various periods, there is no doubt but that this remedy has had a great influence in the matter. The very large decrease in the death-rate from scarlet fever would indicate that this disease has not been so virulent as formerly. Everyone remembers the epidemic of typhoid in the Spring of 1894, yet the percentage of deaths to the number of cases was less than this year. It would appear that there are few children left who have not had the measles, judging from the number reported, and there ought to be an immunity from this source for some time to come.

No comparative statement of existing cases of consumption can be given, as it is but a short time since physicians have been requested to report them. There were sixty cases reported during the month of June and eighty-four in July.

STOP MILK-FOOD.—In the summer diarrhea of infants and young children, milk-food should be interdicted. Mere sterilisation of the milk given is not sufficient. Fermentation may occur in a septic stomach or intestine. The intestines should be cleansed, milk-food stopped and antiseptic and sedative medication instituted. After a few days of this treatment sterile milk may be given, as the alimentary canal is then in a condition to bear it.—*Polyclinic.*

STATE MEDICAL EXAMINATIONS.

Conducted by WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.
Member New York State Medical Examining and Licensing Board.

HEREWITH are appended statistics of the work of the New York State Boards of Medical Examiners for the academic year ending August 1, 1895, furnished from the regents' office and classified for the several examinations held during that period :

September, 1894, total number of candidates 83

		Successful.	Rejected.	Per cent. Rejected.
State Board....	76	52	24	31.5
Homeopathic...	6	6	..	....
Eclectic	1	1	..	....

November, 1894, total number of candidates 77

		Successful.	Rejected.	Per cent. Rejected.
State.....	69	46	23	33.3
Homeopathic ..	5	4	1	20.
Eclectic	3	3	..	....

January, 1895, total number of candidates 56

		Successful.	Rejected.	Per cent. Rejected.
State	49	33	16	32.6
Homeopathic...	6	6	..	....
Eclectic	1	1	..	....

April, 1895, total number of candidates 66

		Successful.	Rejected.	Per cent. Rejected.
State	61	44	17	27.8
Homeopathic...	5	5	..	....
Eclectic	..	..	..	....

May, 1895, total number of candidates 163

		Successful.	Rejected.	Per cent. Rejected.
State.....	138	96	42	30.4
Homeopathic...	24	21	3	12.5
Eclectic.	1	1	..	....

June, 1895, total number of candidates 232

		Successful.	Rejected.	Per cent. Rejected.
State.....	213	174	39	18.3
Homeopathic...	14	10	4	28.5
Eclectic.	5	4	1	20.

GRAND TOTALS.

		Successful.	Rejected.	Per cent. Rejected.
Total No. examined during year	677	507	170	25.1
" " " by State Board	606	445	161	26.5
" " " " Homeopathic Board.	60	52	8	13.3
" " " " Eclectic Board	11	10	1	9.1

MEDICAL SYLLABUS.

The regents of the university have lately issued examination bulletin number seven, a medical syllabus, prepared under the direction of the state board of medical examiners. The purpose of this syllabus is to specify, for the guidance of candidates, the topics covered by the examinations that are now required to be taken under the statute by all applicants for license to practise medicine and surgery in this state. Candidates, however, need not flatter themselves that the examiners will take up these topics *seriatim* and propound questions based upon each head from beginning to end until all are exhausted. This would be a public advertisement of the methods pursued in the examinations and would, of course, thwart its purpose. Topics, however, will be chosen from this syllabus for a basis of each group of questions propounded; nor will the examiners go outside of this syllabus in formulating the examination queries.

This syllabus is subject to revision from time to time, hence the latest edition should always be consulted. The bulletin can be obtained on application to the regents' office, Albany, and a remittance of 25 cents.

THE ILLINOIS BOARD OF HEALTH.

The following preamble and resolution explains the issue between the Woman's Medical College and the Illinois board of health:

WHEREAS, The faculty of the Northwestern university woman's medical college adopted a set of resolutions, criticising the Illinois state board of health for having issued to three non-graduate students of said college the state certificate entitling them to practise medicine, whom they claim were not entitled to receive them, and charging the board with having adopted a lax policy in numerous other instances, thereby seriously detracting from the usefulness of the board; and

WHEREAS, Although the resolutions were "ordered to be placed before the Illinois state board of health," they were furnished to the various medical publications of the country simultaneously with their presentation to the board and before the board had an opportunity to make any defense; and

WHEREAS, The said college has not made any investigation of the methods or policy of the board, and could not be in possession of information upon which to found such serious charges; and

WHEREAS, The secretary of the faculty admitted to the secretary

of the board that the resolutions were adopted without due consideration and were not applicable to the present board; and

WHEREAS, In the past two years no certificate has been granted to any applicant upon an average rating of less than 80 per cent. on all branches, and the questions and examination papers and a tabulated record of all examinations are preserved, and are matters of record in the office; and

WHEREAS, It is not in the province of the board to adopt any policy regarding the admission to its examinations of non-graduates, the law prescribing that "non-graduates shall submit themselves for examinations," and further prescribing that "the examinations shall be of an elementary and practical character;" therefore, be it

Resolved, That justice demands that the faculty of the Northwestern university woman's medical college, and all others interested, inform themselves as to the methods and policy of the Illinois state board of health in conducting its examinations, with a view to the establishment of the charges made, or of making such withdrawal, alteration or explanation of the charges as the facts may warrant; and further, that the faculty inquire as to whether any individual interest or personal animosity prompted the drafting and circulating of the resolutions.

(Signed) B. M. GRIFFITH, M. D.,
SARAH HACKETT STEVENSON, M. D.

MAINE MEDICAL REGISTRATION BOARD.

It affords the *Journal* much satisfaction to be able to give the minutes of the organisation of the board of registration at Augusta, to give the form of application for registration of medicine and to be able to state that registration of physicians of the state is going on as fast as could be expected.

The importance of the consummation of this work is appreciated only by a few, because but little attention has been given to it.

Its far-reaching effect can be estimated by reviewing the results of such a law in other states, like that of Minnesota.

To assist in the accomplishment of this grand result has been one of the highest aims of the *Journal*.

It will be remembered that Dr. Millard in his excellent paper, printed in our last issue, stated that "in a period of twelve years the proportion of physicians to the population in Minnesota has been reduced from one practitioner to every 650 in 1883, to one to every 1,000 in 1895." The state is substantially rid of the traveling charlatan.

The London Lancet in a recent editorial says:

It is a disagreeable reflection but a necessary and salutary one that the honor, dignity and general well-being of medical men depend upon the numbers of medical practitioners being kept within reasonable limits. If these limits be exceeded—and we take it that in this country and in America they have already been largely exceeded—the inevitable law of supply and demand comes into force; the temptation to undersell their brethren becomes to many irresistible and the whole profession suffers in dignity.

Regulating the practice of medicine by efficient registration will not only diminish the number of physicians but it will increase their efficiency—two important things to uphold the honor and dignity of the profession.

Those who are eligible to registration should send to Dr. A. K. P. Meserve, 109 Emery street, Portland, for blanks, fill them out as indicated and send them in at once, to facilitate the work as much as possible.—*Journal of Medicine and Science.*

MEDICAL EXAMINERS FOR THE STATE OF GEORGIA.

Under the above title the *Southern Medical Record* publishes an editorial, written by Dr. J. McFadden Gaston, which gives a synopsis of the new law now in force in the state of Georgia. This article so admirably sets forth the new medical status of the empire state of the South that we quote it in full:

The bill which passed the legislature of Georgia for the regulation of the practice of medicine in the state, permits all who were entitled at the date it went into effect to exercise the office of physician or surgeon to continue in the discharge of their duties.

The large brood of quacks developed in the city of Atlanta, by the laxity of our laws heretofore, will doubtless presume upon this recognition to assert their claims to a place in the medical profession, from which they have been debarred by ethical standards. It, therefore, devolves upon the practitioners of good standing in the regular school to draw the lines now more distinctly than ever to protect the medical profession from the encroachments of those not conforming to the rules and regulations of the ethical code.

This applies not only to those holding diplomas from schools not recognised as regular, but to the graduates of regular schools who are not following the lines of practice inculcated by their schools, and by the Medical Association of Georgia under the code of ethics laid down for the guidance of the profession by the American Medical Association. There are now in this city and in other cities of Georgia, a large number of regular graduates who

are engaged in the practice of quackery in its various forms, and so far as the enactment of the bill goes, they are at liberty to keep up those practices. But they are not entitled to recognition by the regular practitioner in pursuing this devious course and should be ruled out of the medical profession. Those who are openly resorting to a species of advertisement not consistent with medical ethics, should be placed by all medical men of good repute in the category of quacks, who are debarred from recognition by consultation or otherwise. If these members of the medical profession prefer such irregular procedures to a compliance with the code of ethics, we can only say that "Ephraim is joined to his idols, let him alone." But those who prize their good name in the profession should wipe their hands from the stain of professional association with all such degenerate sons of Æsculapius.

The working of the new law will effectually rule out all such vultures as Flower, who has been preying upon the people of Atlanta and other Southern cities during the past few years.

The traveling firms of so-called doctors, who have spent some weeks or months of each year in our city, have imposed upon the credulity of those suffering from imaginary ailments and have reaped a large harvest of pecuniary gain from people who were little able to meet their exactions and who received, in most cases, no benefit whatever from their treatment.

The authorities should keep a close watch upon these harpies in future and compel them to move on when disposed to stop here.

In respect to the bearing of the bill upon the medical colleges and the graduates of the same for the future, it remains to be seen what will be accomplished for the welfare of the community in supplying competent physicians.

The requirement of a three years' graded course of lectures of six months each, must necessarily afford better preparation for the practice of medicine and surgery than the former two years' course of five months each, with a simple repetition of the same lectures.

What is still of vital importance remains undone by this bill, and is not sufficiently insisted upon by any of the medical schools, that is, the preliminary training of the student by a competent preceptor before entering upon a course of medical lectures. Fifty years ago this requirement was fulfilled in the case of most students before going to a medical college, and when a young man went into the lecture-room with this preparation, he could take in more satisfactorily what was taught by the professors in the various departments.

This omission is not met by the requirement of the Southern Medical College Association for preparatory scholarship in the ordinary branches of knowledge before entering upon the study of medicine. However necessary this may be to properly comprehend the instruction of the lecture-room, it cannot supply the deficiency of a special preceptor in the rudimentary departments of

anatomy, physiology, materia medica and chemistry, for the medical student.

Unfortunately, a large proportion of the young men who have entered our medical colleges in recent years, have not possessed the ordinary schooling or the elementary medical training which should prepare them for a course of lectures in a medical college.

The natural consequence of this lack of preparatory instruction is manifested by their inability to comprehend what is taught by the professors, and with the multiplicity of matters presented each day, they become confused and receive little profit.

This precipitation will be very materially modified by the operation of the medical examining board, which must tend to impress upon prospective students the importance of proper preparatory study.

The division of the medical examiners into three boards of five members each, which meets the diversity of teaching in the regular, eclectic and homeopathic school, ought to be satisfactory to all parties. If the men who have been appointed by the Governor to constitute the regular board of examiners do their duty faithfully and discreetly; no graduate of any regular school of medicine in Georgia who is fitted to enter upon the duties of his profession ought to be rejected.

If from any cause a young man gets hold of a diploma without proper qualification, this examination by the board is intended to put a check upon his wild career of adventure and by reminding him that he needs further instruction, a great benefit will be conferred upon him, and a greater still upon the community in which he expects to practise.

It is to be expected that personal influence may seek to gain favor for candidates at times, and yet the members of the board should prove themselves independent of all such favoritism.

The wise provision that no member of the medical board shall be connected with any of the medical colleges should prove an effectual guarantee against any partiality for the students of either school.

The competition of the different medical schools in Georgia will in future resolve itself into a decision in favor of that one which affords the best training for the duties of the physician and surgeon. A student will no longer raise the question as to the school in which he can get a diploma easiest and with the least outlay. His inquiry will be directed to getting assurance of the attainment of that knowledge of the different branches which will enable him to pass a satisfactory examination by the faculty for graduation and subsequently to meet the requirements of the board of medical examiners for the state of Georgia, who are sworn to do their duty fairly and justly. So mote it be. J. McF. G.

The following gentlemen are the appointees constituting the medical examining boards:

Regular Board.—Dr. F. M. Ridley, LaGrange, three years;

Dr. J. B. Baird, Atlanta, one year; Dr. A. A. Smith, Hawkinsville, two years; Dr. E. R. Anthony, Griffin, two years; Dr. W. O'Daniel, Bullards, one year.

Homoepathic Board.—Dr. C. C. Schley, Savannah, three years; Dr. R. A. Hicks, Rome, one year; Dr. M. A. Cleckley, Augusta, two years; Dr. C. A. Geiger, Roswell, two years; Dr. E. B. Schley, Columbus, one year.

Eclectic Board.—Dr. M. T. Salter, Atlanta, one year; Dr. M. K. Phillips, Bremen, two years; Dr. J. F. Harris, Dalton, two years; Dr. J. Frank Harris, Thomas county, three years; Dr. W. V. Robertson, Rehoboth, Morgan county, one year.

RECENT MEDICAL LEGISLATION IN MINNESOTA.

That Minnesota is in the van of progress as regards keeping up a high standard of attainments among those allowed to practise medicine within the state, has been acknowledged ever since the passage of the first medical practice act ten years ago. By that act applicants for a license must have attended at least three courses of lectures of six months each. The legislature just adjourned has gone a step further and has passed a bill providing that of all graduates of a later date than 1898 must have attended at least "four courses of medical lectures, in different years, of not less than six months' duration." From this it is evident that no student who after this year enters a medical school with a three years' course will be admitted to practise medicine in Minnesota, unless he does enough post-graduate study to comply with the requirements.

The legislature was also liberal to the medical department of the State University and gave it a grant of $40,000 for the purpose of building a laboratory. This makes a total of $150,000 appropriated for buildings alone for this department during the last four years.—*Northwestern Lancet.*

THE FOUR-YEAR COURSE.

Nothing which has occurred during the past ten years more definitely indicated the advancement of the science of medicine than the adoption of the four-year course. It has not been the result of any individual movement, but it has come from necessity. There is more to teach and consequently more time is required in which to treat it. The profession, the student and the public demand a more thorough preparation of the man who is to deal with human life. There should be no hesitancy on the part

of colleges in making the full requirement. The number of students may be diminished, but the quality of the graduates will be so vastly improved that the credit of the institution must be somewhat enhanced. A student who refuses to come up to the highest standard of requirement, can be but little credit to the college which graduates him, or to the profession which he enters. In the competition for students it is a question if the short-time schools will not reap the greater harvest. But we believe the influence of the profession (and usually the student follows the advice of his preceptor) will be in favor of the four-year schools.—*Kansas Medical Journal.*

WASHINGTON STATE BOARD OF MEDICAL EXAMINERS.

The governor of Washington has appointed the following physicians to fill the vacancies on the state board of medical examiners of that state—namely, Dr. C. A. Smith, of Seattle; Dr. Henry W. Dewey, of Tacoma, and Dr. E. P. Penfield, of Spokane.—*Medical Bulletin.*

Society Proceedings.

MEDICAL SOCIETY OF THE COUNTY OF CHAUTAUQUA.

THE society held its annual meeting at the Thompson House, Mayville, Tuesday, July 11, 1895, at 11 o'clock A. M. Officers for the ensuing term were elected as follows: president, E. S. Rich, M. D., of Kennedy; vice-president, Morris N. Bemus, M. D., of Jamestown; secretary-treasurer, C. A. Ellis, M. D., of Sherman; censors, James Murphy, M. D., of Sherman, Thomas D. Strong, M. D., of Westfield, and A. H. Bowers, M. D., of Jamestown.

Reports and discussions occupied the remainder of the morning session when the meeting adjourned to the Sherman House, Jamestown, the second Tuesday in January, 1896. Dinner was served at the Thompson House.

The society took the early afternoon steamer for Lakewood where a scientific session was held at the Kent House. The following papers were read: President's address, Dr. Nelson G. Richmond, Fredonia; The Heart in Anemia, Dr. De Lancey Rochester, Buffalo, N. Y.; Abnormalities of the Urine in Disease and

their Significance, Dr. Edward C. Lyman, Jamestown; Some Observations in the Treatment of Cerebro-spinal Meningitis, Dr. E. M. Scofield, Jamestown.

Dr. C. E. Lundgren, of Jamestown, had a paper on The Abuse of Some Narcotics, but there was not time for all and he withheld the paper for the next meeting.

Dr. James T. Whittaker, of Cincinnati, a guest at the Kent House, was invited to attend the meeting. He gave important information regarding the use of antitoxin. He was the first to use antitoxin in this country.

Supper was had at the Kent, after which the members and guests went to Jamestown.

Those in attendance were Drs. Thomas D. Strong, W. A. Putnam, Westfield; E. S. Rich, Kennedy; C. A. Ellis, James Murphy, Sherman; V. M. Griswold, Fredonia; William Duke, Lily Dale; E. A. Scofield, Bemus Point; George F. Smith, Sinclairville; J. C. Lewis, Panama; William M. Bemus, Morris N. Bemus, A. H. Bowers, C. E. Lundgren, E. M. Scofield and E. C. Lyman, Jamestown. Dr. De Lancey Rochester, of Buffalo, was a guest of the society.

Treatment of Early Abortion.—A conservative treatment of early abortion is recommended by Schauta, of Vienna, in a recent article. The old rule that pain and hemorrhage combined mean inevitable abortion he does not indorse, and thinks the accident preventable as long as the hemorrhage is not excessive or the cervix dilated. He does not try to check the bleeding and trusts to rest, which is continued for eight days after the last bleeding. In those cases where the os dilates and abortion becomes inevitable, he tampons with a strip of iodoform gauze about two yards long and the width of three or four fingers' breadth. He prefers to retract the perineum with the fingers of the other hand instead of using the speculum, and renews the tampon at the end of twenty-four hours at the least, removing it sooner if the appearance of sacral pains indicates that the ovum has been expelled from the womb. This method of treatment is in sharp contrast to the radical advice so often given of late to go in at once and curette out the womb as soon as an abortion becomes inevitable—a practice which Schauta objects to because of the danger of leaving fragments of membrane behind.—*Western Lancet.—Medical and Surgical Reporter.*

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

All communications, whether of a literary or business nature, should be addressed to the managing editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

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THE ERIE COUNTY HOSPITAL.

THE evolution of the Erie County Hospital of today from the late County Asylum for the Insane is fraught with interest to the medical profession, who confidently look forward to the time when its present manifest imperfections and crudities shall have given way to the smooth and systematic working of a well and providently managed charity. And, at this early period of growth, it is certainly encouraging to remember the fact that the widely known and efficient Bellevue Hospital, of New York City, likewise began its career in the abandoned wards of the old insane asylum, which latter building still forms the nucleus of that institution.

It was our recent privilege to listen to Dr. Stephen Smith whose connection with Bellevue dates from its inception, and in his account of the long and arduous struggles of the medical men to free the institution from political control and put it on an independent footing, was faithfully mirrored the inevitable contest which confronts the medical staff of the Erie County Hospital.

The recent conflict between the executive committee of the medical staff and the committee of supervisors, which was so amply exploited by the daily press, gave the public an inkling of the true state of affairs which can but result in good. For months there had been a lack of harmony between the medical and political forces, the latter seemingly being animated by a desire to oppose and obstruct progress instead of coöperating for the good of the hospital. While the duties of committee, keeper, medical staff and superintendent were not yet fully and explicitly defined, proper pains had not been taken by the supervisors and keeper to render themselves familiar with the existing rules and regulations;

and where the animus of discontent and contention was present, discord would easily ensue.

The need of improvement in the matter of diet, service, general cleanliness and sanitation, as well as the proper authority to secure it, was glaringly apparent. Appeals to one authority were referred to a second or third, each on the ground that in complying with the suggestions they would be exceeding their proper sphere of duty or responsibility, and thus were inaugurated and maintained soul-wearying delays and crying abuses. It should be remembered, in attempting to judge the respective merit of the parties involved, that the positions of the staff and the political authorities were and are markedly different. On the one hand, we have a body of educated, public-spirited citizens who have proffered their services freely in the cause of the sick poor. They not only receive no pay but expend greater or smaller sums in going to and fro, in supplying deficiencies in the way of instruments and the like, particularly in the past, to say nothing of the direct and ofttimes large loss of professional income inseparable from attendance at an institution so remotely situated. While they do not desire, we assume, to pose as martyrs or to deny the voluntary assumption of those duties, they may still claim that by virtue of such assumption, which redounds to the advantage of the county and of the sick poor, they are entitled to proper recognition and cordial support.

Under the old condition of affairs, diseases were rarely diagnosticated, much less properly treated, and patients whom a prompt and intelligent handling would soon have restored to usefulness and self-support, were unnecessarily left for weeks or months to be fed and lodged at the public expense, to the exclusion of others equally deserving of assistance. The paramount need of these staff physicians in their altruistic labors is the aid and encouragement of a board of managers which shall be strong, effective and non-political, also a hospital superintendent in whom shall combine the qualities of skill, executive ability and force.

In supplying these wants it is evident to every right-minded citizen that politics should have no voice. Politics and hospitals should be absolutely divorced; they have nothing really in common. To commit the sick poor to the care of politicians who are only too often manifestly indifferent to their duties, or avowedly active in securing for themselves "what there is in it," is little short of a crime against the community and should be frowned down upon by every thoughtful citizen. The remedy for this state of affairs

is apparent and should be resorted to at the earliest possible moment. Almshouse and hospital should be absolutely divorced by legislative enactment, and the latter placed under the immediate control of a competent and carefully selected board of managers, who should coöperate with the medical experts of the staff and serve without pay; then, there being no axes to grind, economy and progress would go hand in hand and in its capacity and good management the Erie County Hospital would soon compare favorably, we believe, with any of the similar great, free institutions of the land.

While the reformations and changes which have been effected during the past two years have been so many and important as to deserve our heartiest congratulations, want of space forbids their enumeration, but they are such as justify the hope that, should the managerial changes above suggested be carried into effect, the good work will go on and in the near future we may be enabled to look with pride upon this, our greatest county charity.

TOPICS OF THE MONTH.

Dr. William H. Daly, of Pittsburg, read a paper at the Hot Springs meeting of the Mississippi Valley Medical Association, in which he maintained the theory that malaria is a water-borne disease, taking the ground that the ingestion of water by the mouth would account for the majority of cases, to the exclusion of the generally accepted theory of aërial infection. Dr. Daly's observations have been made upon himself and upon several fellow-members of a sportsman's club, who have sought the marshes for duck shooting annually for the past twenty years. At first they braved the night air, relying on the free use of quinine as a preventive, but had drank the marsh water freely. Quinine having proved an inefficient safeguard, it occurred to Dr. Daly that it would be well to give up drinking marsh water. After testing this for a considerable time, he and his fellow-sportsmen found they could expose themselves freely to the night air of the marshes with impunity and without the aid of quinine. Dr. Daly extolled the value of Laverau's investigations as to the cause of malarial fever, and urged their more general teaching in the schools.

This subject is of much importance and deserves to be carefully investigated, and it is to be hoped that Dr. Daly and others will pursue the subject to a substantial conclusion.

Obituary.

HENRY W. WILLIAMS, A. M., M. D.

THIS eminent ophthalmologist and author, whose fame was not confined to this country, but extended throughout Europe, has been a conspicuous professional figure for many years. He was born in Boston, on December 11, 1821, and Boston continued to be his home during his whole life. He was educated in the schools of his city and prepared to enter Harvard college at the Latin School. His health, however, was so poor that he did not enter college. He took up mercantile pursuits, instead, but these became distasteful to him and he soon abandoned them and began the study of medicine. He attended lectures at the Harvard Medical School and graduated in 1849. He then went to Europe for three years, following the various hospitals and the services of distinguished practitioners in Berlin, Heidelberg, Zurich and Paris. Much of his time was spent in the latter city, and it was here that he became especially interested in diseases of the eye. On his return to Boston he began the practice of medicine in all its various departments. Ere long, however, he drifted into his chosen specialty and was soon prominent as an ophthalmic surgeon. In 1864, the Boston City Hospital was organised and he was made its ophthalmologist, a position which he held till 1891, when, by reason of ill-health, he resigned and was made consultant. In 1867, he was foremost in establishing the Massachusetts Medical Benevolent Society, which was designed for the relief of professional men and their families. He was afterward its president for many years. He was an active Fellow of the Massachusetts Medical Society from 1849 and was its president in 1880 to 1882. He was also an early member (1864) of the American Ophthalmological Society and was its president in 1869, 1870, 1871 and 1872. Harvard, in 1868, conferred upon him the honorary degree of A. M. Three years later he was made an honorary member of the Phi Beta Kappa society. In 1868, also, he won the Boylston prize for an essay entitled Recent Advances in Ophthalmic Science. The year was made still more eventful to him by a call which he received from Harvard Medical School to the chair of ophthalmology. This position he occupied for twenty-two years, after which, on account of ill-health, he retired. But on his retirement he endowed the chair generously.

He was the author of numerous writings, among which are: Our Eyes and How to Use Them; Recent Advances in Ophthalmic Science; and Diagnosis and Treatment of Diseases of the Eye. His last public appearance of note was, last spring, before the American Academy of Arts and Sciences, of which he was a member, when he read an obituary of the late von Helmholtz.

Dr. Williams was a man of large stature and strong character. He was an excellent teacher, being clear, forcible and persuasive in his speaking. As an operator on the eye, he was ambidextrous, and is said to have had few equals. He achieved great success in his profession, and was an example worthy of imitation in his untiring patience, punctuality and conscientious devotion to duty.

Dr. Williams died at his home, 15 Arlington street, Boston, June 13, 1895, after a very short illness. He leaves a widow, one daughter and six sons, three of whom are in the medical profession. One of the latter, Dr. Charles H. Williams, is well known as an ophthalmic practitioner and assisted in the revision of the enlarged edition of his father's work on diseases of the eye, one of the best manuals on the subject which has ever emanated from the American profession.

The remains of Dr. Williams were tenderly borne to their last resting-place by his sons. Thus closes the last chapter in the life of another one who has made invaluable contributions to the world and left an indelible impress upon this generation by his example and his works.

Dr. Arthur Victor Conley, house-physician at the Buffalo Hospital of the Sisters of Charity, died of typhoid fever at that institution, August 23, 1895, after an illness of three weeks' duration, aged twenty-nine years. He graduated in medicine May 16, 1895, from Niagara University Medical College, standing at the head of his class. He was a young man of great promise and his early death is greatly to be lamented.

Personal.

The following named physicians, residing in Buffalo, in some instances accompanied by their wives as noted, have recently returned or are returning from foreign travel: Dr. and Mrs. L. F. Harvey, from a tour to the Sandwich Islands, Japan, and so around

the world; Dr. and Mrs. Herman Mynter, from Denmark; Dr. D. W. Harrington, from a tour in Europe; Dr. Geo. F. Cott, from a sojourn in Vienna for professional advancement; Dr. and Mrs. H. Y. Grant, from a vacation tour to the Continent, and Dr. and Mrs. A. W. Hurd, from a wedding journey abroad.

THOMAS H. NORTON, Ph. D. (Heidelberg), professor of chemistry in the University of Cincinnati, has received the honorary degree of Doctor of Science from Hamilton College. This degree is one of some rarity and has been conferred but once before in the history of the college.

DR. A. L. HUMMEL, of Philadelphia, the eminent medical journal advertiser, has removed his business to New York and established his offices at 108 Fulton street. We have no doubt this will prove an advantageous change to the ever increasing business of this house.

DR. FRANK PARSONS NORBURY, of St. Louis, editor of the *Medical Fortnightly*, has been elected professor of medicine and clinical medicine in the College of Physicians and Surgeons.

DR. J. G. MEIDENBAUER, of Buffalo, has removed his office from 204 High street to 291 Maple street, corner of High. Hours: 7 to 8 A. M.; 1 to 2 and 6 to 7 P. M.

DR. ALBERT T. LYTLE, of Buffalo, has lately occupied his fine new residence on the corner of Elmwood and Lexington avenue.

NOTES FROM CHAUTAUQUA COUNTY.

THE physicians of Chautauqua county are organising against dishonest debtors, as will be observed by the following circular:

SHERMAN, N. Y., August 1, 1895.

DEAR DOCTOR,—Knowing by experience the amount of charitable work all physicians do (and willingly), several of us have agreed to help one another to organise a plan to avoid serving "dead beats." The plan is this: every four months each member is to send to the undersigned the names of all parties that have played the "dead beat act" or refused to pay proper accounts. The names from all over the county are to be arranged in alpha-

betical order and printed on good paper in a way to be of easy reference. A new list will be prepared January 1st, May 1st and September 1st of each year, if this receives the support it should have. Who among us would not many a time rather have given a dollar and been able to sleep, than ride in some storm to find that the newcomer never had paid a doctor and probably never would? There is nothing in this to prevent anyone attending any person they desire; but all who wish can know whether their call is to parties who are not in the habit of paying. If this meets with your approval, sign "yes" on the enclosed card, with the other blanks filled, and mail at once, then make out your list and send it with 50 cents to me as soon as possible, and by September 1st I will try to have all lists ready.

Fraternally, C. A. ELLIS,
Sec'y Chautauqua Co. Medical Society.

CALLING THEMSELVES DOCTORS.—The new law fixing the penalty at from $250 to $500, or imprisonment, or both, for any persons practising medicine illegally, or calling themselves "doctor" will probably be enforced in Chautauqua county. At the annual meeting of the Medical Society of the County of Chautauqua, held July 11th, the following motion was unanimously passed:

That the board of censors be authorised to draw upon the treasury for any amount required to investigate the illegal practice of medicine, and to secure the enforcement of the law.

The board of censors is determined to make the most of this opportunity and will proceed to call to account any persons whom they believe are liable to the penalties of the statute.

DR. EDWARD AMES, of Kalamazoo, Mich., formerly of Sherman, N. Y., has been spending a part of his vacation in Chautauqua county. He will return home and visit Boston with the Knights Templar.

DR. NELSON G. RICHMOND, of Fredonia, has returned from New York, where he has been pursuing a post-graduate course with particular reference to intubation and diseases of the rectum.

DR. MORRIS N. BEMUS, of Jamestown, has been appointed pension examiner, in place of Dr. H. P. Hall, deceased.

DR. W. A. PUTNAM, of Westfield, is getting to be one of the crack shots of the Westfield Gun Club.

What Our Contemporaries Think of Us.

WE CANNOT resist the temptation to preserve this string of pearls. Nothing in our whole life has been so gratifying as this record of the esteem in which we are held by our contemporaries, and we take this opportunity to thank them, one and all, for their kind words and good wishes.

[Boston Medical and Surgical Journal.]

SEMI-CENTENNIAL ANNIVERSARY OF THE BUFFALO MEDICAL JOURNAL.—This excellent contemporary proposes to signalise its semi-centennial anniversary, which will occur in a few weeks, by increasing the number of its pages from sixty-four to eighty, and making other improvements.

[New York Medical Journal.]

Medical journals, like wine and violins, are prone to grow better as they grow older, and the BUFFALO MEDICAL JOURNAL shows manifest evidence that it conforms to the rule in this respect. We wish it centuries of ample prosperity.

[The Canadian Medical Review, Toronto.]

The BUFFALO MEDICAL JOURNAL, which was founded by the late Dr. Austin Flint, will be fifty years old in a few weeks. Its semi-centennial anniversary will be signalised by increasing its reading pages from sixty-four to eighty pages. There are very few medical journals that have reached this age, but this journal will never grow old or out of date. We extend our congratulations and best wishes for its continued prosperity.

[Leonard's Illustrated Medical Journal, Detroit.]

The BUFFALO MEDICAL JOURNAL is now close upon its fiftieth year. This will be celebrated in a fitting manner by an increase of good things between its covers. There are few, very few, medical journals reaching this lusty age. Success to its editor, and may more happy journal-birthdays come to him and his.

[The Buffalo Commercial.]

In a few weeks the BUFFALO MEDICAL JOURNAL will celebrate its semi-centennial anniversary. It is one of a very few medical publications which have attained the age of fifty years.

[The Buffalo Courier.]

The BUFFALO MEDICAL JOURNAL will be fifty years old in a few weeks. There are few medical journals in the country of equal age and if the

medical brotherhood in Buffalo plays a more important part in the educational, philanthropic and social life of the community, as we think, than is often the case in our cities, it is perhaps due in part to the long existence here of a standard professional publication which has served to strengthen the *esprit de corps* and hold the members up to a high mark.

[The Journal of the American Medical Association.]

After a half century of good work in the cause of medical literature and for the welfare of mankind, the BUFFALO MEDICAL JOURNAL proposes to signalise its semi-centennial anniversary by increasing its reading pages and by making other improvements. The editors will please accept the congratulations of the *Journal of the American Medical Association*, on the youthful vigor which still characterises our Buffalo contemporary despite the fifty winters that have passed away since it was founded. We hope that our contemporary may still be young and as active when it celebrates its centenary.

[The Chicago Medical Recorder.]

The BUFFALO MEDICAL JOURNAL is fifty years old. Its semi-centennial will be signalised by increasing its reading pages to eighty and by other improvements. The journal is to be congratulated upon turning the half century mark, in which distinction it stands almost alone.

[The Philadelphia Polyclinic.]

There are few medical journals in this country that have reached the mature and dignified age of the BUFFALO MEDICAL JOURNAL and we heartily congratulate our contemporary, wishing that its future career may be even more prosperous and honored than its course hitherto.

[Maryland Medical Journal, Baltimore.]

The BUFFALO MEDICAL JOURNAL will celebrate, in a few weeks, its semi-centennial. This journal was founded by the late Dr. Austin Flint, and has always stood in the front rank of medical journalism.

[Virginia Medical Monthly, Richmond.]

The BUFFALO MEDICAL JOURNAL is about to celebrate its semi-centennial anniversary by increasing its reading pages from sixty-four to eighty and by other improvements. It is an excellent journal and deserves the success its announcement indicates it has achieved.

[The Cleveland Medical Gazette.]

We congratulate our esteemed contemporary, the BUFFALO MEDICAL JOURNAL, upon completing its half century of existence.

[Fort Wayne Medical Magazine.]

The BUFFALO MEDICAL JOURNAL was established in 1845 by the renowned Dr. Austin Flint and for fifty years has continued uninterrupted in its career of usefulness. We congratulate the present able and enterprising editors upon the success attained by it and predict a marked increase in its popularity and standing when the contemplated new changes shall have been inaugurated.

[Medical News, Philadelphia.]

The BUFFALO MEDICAL JOURNAL will signalise its approaching semi-centennial anniversary by increasing its reading pages and by making other improvements. It belongs in the class of medical publications that reflect honor and credit on the profession.

[Cincinnati Lancet-Clinic.]

The BUFFALO MEDICAL JOURNAL is well along in its fiftieth year and full of vim, vigor and vitality. There are not more than a half-dozen American medical journals that have turned the half-century point.

[College and Clinical Record, Philadelphia.]

The BUFFALO MEDICAL JOURNAL will be fifty years old in a few weeks. There are very few medical journals in this country that have reached the age of fifty years, and none that have exceled this valued contemporaneous publication in its fidelity to the best interests of the profession.

[Columbus Medical Journal.]

We desire to congratulate our friend and contemporary, Dr. Wm. Warren Potter, managing editor of the BUFFALO MEDICAL JOURNAL, on the near approach of its semi-centennial anniversary. There are few medical journals in this country that have reached the age of two score and ten.

[Texas Medical Journal, Austin.]

The BUFFALO MEDICAL JOURNAL will celebrate its semi-centennial shortly, by increasing its reading pages from sixty-four to eighty and making other improvements. The *Journal* extends its congratulations to Brother Potter; but we want it distinctly understood that he has not been editing the JOURNAL all these years. Long may he and the JOURNAL live and prosper.

[The Quarterly Journal of Inebriety, Hartford.]

The BUFFALO MEDICAL JOURNAL has passed the half-century milestone of existence, and is a typical example of the survival of the fittest. With Dr. Potter at the helm, one can safely predict another half century, free from rocks and storms, and replete with strong helpful influences for science and humanity.

[North Carolina Medical Journal, Wilmington.]

The BUFFALO MEDICAL JOURNAL will soon reach the ripe age of fifty years. This journal is already one of the very best medical monthlies in the country, and we extend our sincerest congratulations to the editor on the great success the past has brought, and wish him still more in the future.

[Louisville Medical Monthly.]

We congratulate Dr. Wm. Warren Potter on the fiftieth anniversary of his most excellent publication, the BUFFALO MEDICAL JOURNAL. But few journals in this country can claim such deserved distinction.

[Medical Mirror, St. Louis.]

The sterling monthly magazine, the BUFFALO MEDICAL JOURNAL, will have its fiftieth birthday this month, and its managing editor will signalise the event by increasing its reading pages and making many other improvements. Dr. Wm. Warren Potter is to be congratulated on the possession of so good a journal, one of the best in the United States. We should be glad to see every doctor in the United States a subscriber to it.

[Alabama Medical and Surgical Age.]

We congratulate the editor of the BUFFALO MEDICAL JOURNAL for the splendid success which his journal has achieved. Many journals during these hard times have gone to the wall, and it is an indication of much merit, as well as appreciation on the part of the profession, that the JOURNAL is enabled to increase the number of its reading pages and make other improvements.

[The Ophthalmic Record.]

The BUFFALO MEDICAL JOURNAL is now fifty years old. It will enter on the work of the last half of its first century enlarged and otherwise improved. Our friend, Dr. A. A. Hubbell, has been made an associate editor, which insures that the ophthalmic part of the JOURNAL will be kept up to date. Altogether it is one of the best monthlies published.

[The Medical Age, Detroit, Mich.]

Our esteemed contemporary, the BUFFALO MEDICAL JOURNAL, will be fifty years old in a few weeks, and its editor proposes to signalise its semi-centennial by increasing its reading pages and making other improvements that will keep it abreast of the progress of the period.

[The Atlantic Medical Weekly.]

The BUFEALO MEDICAL JOURNAL will be fifty years old in a few weeks. It is one of our most valued exchanges and we trust it may live to cele-

brate its centennial anniversary, and that in the next fifty years it may continue, as it has in the past, to work for the best interests of its large clientage, and for the advancement, improvement and upbuilding of the profession we all love so well.

[The Medical Examiner, New York.]

The BUFFALO MEDICAL JOURNAL has signalised its semi-centennial anniversary by increasing its reading pages and making several other improvements. It is one of the few medical periodicals that have attained the age of fifty years, and it has our congratulations upon this occasion.

[The Railway Surgeon, Chicago.]

The BUFFALO MEDICAL JOURNAL proposes to celebrate its semi-centennial (for it will be fifty years old in a few weeks) by increasing its size to eighty pages of reading matter and by making other improvements, which will make it an even more excellent journal than it has been heretofore.

[The Medical Herald, St. Joseph, Mo.]

The BUFFALO MEDICAL JOURNAL will celebrate its semi-centennial anniversary by increasing its reading matter to eighty pages and otherwise enhancing its value to its subscribers. We congratulate Dr. Potter upon the well-deserved success he has achieved in medical journalism.

[American Journal of Insanity, Chicago.]

The BUFFALO MEDICAL JOURNAL reaches its semi-centennial this year, being thus one of the veteran medical publications of this country. The *Journal*, as its senior by a year or more, takes this occasion of offering its editorial congratulations.

[The Canadian Practitioner, Toronto.]

The BUFFALO MEDICAL JOURNAL was first published in 1845 and will be fifty years old in a few weeks. It has for a long time been generally recognised as one of the best American medical monthly magazines. It scarcely needed anything in the way of improvement, and consequently the new efforts in that direction are all the more creditable because there had been no demand for them. Success to Dr. Potter and his fifty-year-old medical journal.

[Buffalo Sunday News.]

The BUFFALO MEDICAL JOURNAL, one of the best-known, most authoritative and widely quoted journals of its kind in the world, is

approaching its half century birthday, and in August will appear in a new dress and will be fittingly illustrated to celebrate the event. The men who have conducted the journal have given to it an individuality seldom achieved by what are known as trade newspapers, and it has been a success of the most brilliant character.

[Medical and Surgical Reporter.]

The BUFFALO MEDICAL JOURNAL will be fifty years old in a few weeks. There are very few medical journals in this country that have reached the age of fifty years, and the *Reporter* extends its heartiest congratulations and cordial good-will to a contemporary which, after fifty years, has not passed the prime of life, but with renewed spirit promises to be still young when it rounds out its century.

[Colorado Climatologist and Denver Medical News, Denver, Col.]

Few among the many medical journals can count fifty years' existence, but the BUFFALO MEDICAL JOURNAL rounds the fiftieth mile post hale and hearty with an increase from sixty-four to eighty pages of reading matter. May more years—more success—more laurels, be yours, Brother Potter.

[Lehigh Valley Medical Magazine.]

How will we appear forty-four years hence? if, indeed, there should be other than a back number on some upper shelf of a public library to look at. This apparently trival question is suggested by the statement that the youthful-looking and ever-welcome BUFFALO MEDICAL JOURNAL will be fifty years old this summer. If the years shall sit as lightly on us in 1939 as they do today on our Buffalo contemporary, and our appearance be as comely, we shall improve in vigor and in beauty with the passing years. We tender hosts of congratulations; may your centennial find you hale and hearty.

[The Sanitarian, Brooklyn.]

The BUFFALO MEDICAL JOURNAL signalises its semi-centennial anniversary by a process which is alike gratifying to its readers and encouraging to its contemporaries—a mark of merited success on which *The Sanitarian* offers hearty congratulations.

[International Journal of Surgery, New York.]

The BUFFALO MEDICAL JOURNAL will celebrate in a few weeks its semi-centennial, and will signalise the occasion by increasing the number of its pages from sixty-four to eighty and make other improvements. It was founded by the late Dr. Austin Flint and has always stood in the front rank of medical journalism.

[Medical Record, New York.]

The BUFFALO MEDICAL JOURNAL is fifty years old. We extend our congratulations to our esteemed contemporary, and hope it will live to celebrate many more semi-centennials.

[Notes on New Pharmaceutical Products, St. Louis.]

The BUFFALO MEDICAL JOURNAL has, during all of its long and honored career, been a recognised authority in medical literature and it is but just to say that the tiara it wears has gained additional luster from the forceful, virile, editorial management imparted to it by Dr. Potter. Dignified, progressive, earnest and fearless are the typical adjectives marking his work and it gives ample assurance that the opening of its second semi-centennial presages even a more glorious fifty years than that now closed.

[The Atlanta Clinic.]

The BUFFALO MEDICAL JOURNAL was established in 1845 by Dr. Austin Flint, and has enjoyed this very unusual period of success. Dr. Wm. Warren Potter, the present managing editor, is one of the most forcible and interesting writers in the medical profession and whatever he contributes to medical literature possesses the genuine ring of worth. We congratulate our esteemed periodical on its half century of usefulness, and trust it may live, thrive and prosper for many such periods with unabating progress.

[St. Louis Medical and Surgical Journal.]

The BUFFALO MEDICAL JOURNAL has arrived to a good old age, hale and vigorous, and as aggressive as ever. It seems to partake of the nature of wine which improves with age. May all of us live to celebrate its next semi-centennial anniversary—if not in the flesh, in the spirit at least.

[Brooklyn Medical Journal.]

The BUFFALO MEDICAL JOURNAL is among the most highly prized of our exchanges, and we know of no better wish than we can make in behalf of its readers, than that in the fifty years to come it may be as ably edited as it has been in those just passed.

[Medical Bulletin, Philadelphia.]

Not many of the existing journals in the United States have enjoyed a continuous existence of fifty years. Among this number is the BUFFALO MEDICAL JOURNAL, which was founded in 1845. The career of this periodical has been honorable and successful. It has been and is

edited with ability, has published instructive papers by many eminent men, is an influential professional medium and an exchange which is always consulted with pleasure and profit. It has recently announced two excellent additions to its editorial staff in the persons of Dr. Ernest Wende, clinical professor of dermatology in Buffalo University Medical College and health commissioner of Buffalo, and Dr. A. A. Hubbell, professor of diseases of the eye and ear in Niagara University Medical College. The best wishes of the editor of the *Medical Bulletin* are extended to its contemporary, in the hope and belief that its prosperity will be as signal in the future as in the past.

[The Medical Standard, Chicago, Ill.]

The BUFFALO MEDICAL JOURNAL has completed its half century and will celebrate the event by an increase in its reading pages. It has always been a credit to American medical journalism.

[Ontario Medical Journal, Toronto.]

In the middle of this month the BUFFALO MEDICAL JOURNAL was fifty years old, never having missed an issue since its inauguration. It is certainly beyond our province to criticise a confrére, but we may say that its large number of subscribers and long life should testify sufficiently of its worth without any of us expressing an opinion. Our congratulations are extended and we hope to be alive to receive return ones from them when our jubilee is celebrated.

[Western Reserve Medical Journal, Cleveland.]

The BUFFALO MEDICAL JOURNAL will this month celebrate its semi-centennial anniversary. It is one of the oldest medical journals in the United States, and is deserving of great credit for the high journalistic tone which it has maintained during all these years. The celebration will be emphasised by an increase in the size of the journal and other improvements which will meet with the approval of its readers. It is so seldom that we have the opportunity of congratulating a contemporary upon arriving at the years of discretion that it becomes a pleasure for the *Western Reserve Medical Journal* to extend its most sincere congratulations to our Buffalo contemporary upon its arrival at the fiftieth year of its life, and it is our wish that the journal may live and prosper for fifty years more at least.

[The North American Medical Review, Kansas City.]

The BUFFALO MEDICAL JOURNAL will soon celebrate its semi-centennial anniversary by increasing its reading pages from sixty-four to eighty and making other improvements such as will keep it abreast of professional progress. Few medical journals in America have seen

fifty years roll by, and the *Review* extends hearty congratulations and best wishes for its future.

[Health, Sanitation and Climatology of the United States, Washington.]

In 1839, the writer's father was a pupil of Dr. Joseph H. Flint, then a practising physician of Springfield, Mass., father to the founder of the BUFFALO MEDICAL JOURNAL and grandfather to the present distinguished physiologist in New York city. He was indebted to the Fints for many courtesies. Their example, suggestions and instruction served him in many instances in after years while engaged in practice. It is, therefore, a pleasure to note the continued success of a medical journal established by Austin Flint in 1845. May its present editors succeed in impressing their personality upon the American medical public as successfully and effectually as did their distinguished predecessor, and may the BUFFALO MEDICAL JOURNAL live as long as will the fame of Austin Flint.

[Ohio Medical Journal, Cincinnati.]

The BUFFALO MEDICAL JOURNAL, one of the ablest periodicals reaching this office, will, in a few weeks, celebrate its fiftieth anniversary. It will mark the event by increasing the number of its reading pages from sixty-four to eighty each issue. We heartily congratulate the editors, Drs. Thomas Lothrop and Wm. Warren Potter, both upon the journal's long successful career and upon its excellence.

[St. Louis Medical Era.]

It occasions us unusual pleasure to congratulate the BUFFALO MEDICAL JOURNAL on its approaching semi-centennial anniversary. It is not often that such an opportunity occurs, and, therefore, our appreciation of the event is particularly emphasised, especially as the journal which has attained such a distinction is still marked by all the attributes of vigorous life. When a journal reaches across half a century of time it must have achieved success, and its usefulness for the future is greatly increased.

[The Southern Clinic.]

The BUFFALO MEDICAL JOURNAL is fifty years old, and celebrated its semi-centennial anniversary by increasing its reading pages from sixty-four to eighty and other improvements of like value. Dr. Wm. Warren Potter, the worthy editor, has our most hearty congratulations on the occasion and our best wishes for his continued success.

[Clinique, St. Louis.]

The BUFFALO MEDICAL JOURNAL has reached its fiftieth anniversary. There are few medical journals in the country that have reached this age and it speaks well for the management.

[National Popular Review, San Diego.]

We join heartily in congratulating our esteemed contemporary, the BUFFALO MEDICAL JOURNAL, upon its having attained its fiftieth year of life. There are but few journals in medicine that can claim that longevity distinction; and that our confrère can do so speaks volumes for the moral course it must have run in its youth as well as for the rectitude of its prime. With age it seemingly has gained rather than lost, as in its jubilee year it dons a new and youthful garb and increases its reading-matter by the addition of sixteen new pages. We wish our enterprising contemporary as long and as useful an existence as it has just passed.

[The General Practitioner, St. Louis.]

The BUFFALO MEDICAL JOURNAL, established by Austin Flint, M. D., in 1845, is about to celebrate its "golden wedding," as it were. We congratulate the editors on the length of its earthly pilgrimage, and hope the financial success of the JOURNAL has kept pace with its literary prosperity. The period of fifty years in medicine covers great changes in the lives and thoughts of men. In that time many truths have been discovered and many errors ruled for their little day and sunk into oblivion whence they were born, but the Great Watcher, who has separated the worthy from the unworthy, must have some way passed His approval on a medical journal that is allowed to maintain its existence for half a century.

[Hall's Journal of Health.]

The BUFFALO MEDICAL JOURNAL is about to celebrate its fiftieth birthday, an event that rarely occurs in the annals of medical journalism. The issue will be a large one in commemoration of the event, and the JOURNAL will be increased sixteen pages. There is no better journal published.

[Atlanta Medical and Surgical Journal.]

The BUFFALO MEDICAL JOURNAL is about to celebrate its semi-centennial. It was established fifty years ago by the late Austin Flint when there were only about a dozen journals in the country. Its career has been one of continuous prosperity and success. Under the able management of Dr. William Warren Potter it begins its second fifty years increased in size. We offer our best wishes for another half century of prosperity.

[Cincinnati Medical Journal.]

We extend to our venerable and respected contemporary, the BUFFALO MEDICAL JOURNAL, our sincere congratulations. That a medical journal or periodical of any kind lives for fifty years is proof positive

that it is worthy of an existence and wide recognition, that it has been ably managed, and is an earnest that in the future it will increase, not only in size, but in worth, even according to the policy already mapped out by Dr. Potter.

[Denver Medical Times.]

The BUFFALO MEDICAL JOURNAL will celebrate its fiftieth anniversary with its August issue, at the same time increasing its number of pages from sixty-four to eighty. It has always kept thoroughly abreast with the professional progress of the period. We do not recall at present another medical journal which has been in existence fifty years. *The Denver Medical Times* will soon celebrate its fifteenth anniversary, and we were beginning to feel quite old until we learned of the aged Buffalo journal.

[Nashville Journal of Medicine and Surgery.]

We extend the heartiest congratulations to our esteemed contemporary, the BUFFALO MEDICAL JOURNAL, on the near approach of its semi-centennial anniversary. The *Nashville Journal* is six years its junior and we hope we can celebrate our semi-centennial in an equally substantial manner. We congratulate you, Dr. Potter, and earnestly hope that your JOURNAL will live to celebrate its centennial anniversary.

[New York Medical Times.]

The BUFFALO MEDICAL JOURNAL will celebrate its semi-centennial by increasing its reading pages and by other improvements. There are not many medical journals in our country which have reached the age of fifty years, and no better evidence of usefulness and popularity could be suggested. The *Times* extends its congratulations and best wishes and hopes that the JOURNAL may continue as long as it deserves.

[The Refractionist.]

The BUFFALO MEDICAL JOURNAL soon celebrates its golden wedding by increasing its reading matter from sixty-four to eighty pages and by making other improvements that will tend to keep it abreast of the times. The ophthalmological department is well looked after by Dr. Hubbell.

[National Medical Review, Washington, D. C.]

Showers of gold. May this be the case with the editor of the BUFFALO MEDICAL JOURNAL, who now celebrates the semi-centennial anniversary of his monthly. If he will only wait until this journal is fifty years of age we will promise him a present suitable to the occasion. As it is we can only congratulate him ahead for the showers of gold he is sure to receive from old subscribers and new.

[Annales D'Oculistique.]

The BUFFALO MEDICAL JOURNAL, which has long been a familiar and welcome visitor to a large circle of readers, is presently to celebrate its semi-centennial anniversary. The JOURNAL was one of the first to give to *Annales D' Oculistique* in its new form a hearty welcome, and we sincerely reciprocate its kindly sentiments. Its past history is abundant assurance that it will start on its second half-century with new vigor and interest.

[The North American Medical Review, Kansas City.]

The BUFFALO MEDICAL JOURNAL has reached its semi-centennial and has increased in interest *pari-passu*.

[Journal of Medicine and Science, Portland, Me.]

One of our best exchanges is the BUFFALO MEDICAL JOURNAL, which was established by Austin Flint in 1845 and which, therefore, is one of the oldest journals of the country. Its editors, Drs. Lothrop and Potter, propose to enlarge the issue which begins the second half century, have it written by physicians of Buffalo and devoted to the medical profession of that progressive and enterprising city. Dr. Potter, one of the editors referred to, was elected president of the National Confederation of State Medical Examining and Licensing Boards at its last meeting held during the recent meeting of the American Medical Association at Baltimore. Its object is to establish a uniform schedule of requirements for all medical colleges and examining boards, and to assist in perfecting the methods of higher medical education.

[Woman's Medical Journal, Toledo, O.]

A well rounded life of fifty years of activity is granted to but few of us, yet our valued exchange, the BUFFALO MEDICAL JOURNAL, has attained it and seems to have learned the lesson of living so well that the indications are excellent for another half century of existence. Judging the future by the past, our esteemed friend will enter the mystic circle of the twentieth century with a publication of such value to us all, that its perpetuity is assured.

[Buffalo Druggist.]

The jubilee number of the BUFFALO MEDICAL JOURNAL, established in 1845 by Austin Flint, M. D., is a remarkably creditable and interesting number. It is profusely illustrated with half-tone portraits of former editors of its columns and professors of the Buffalo and Niagara Medical Colleges, several of whom have achieved a world-wide reputation. In addition to a large amount of valuable professional reading matter, the number contains an exceedingly interesting special article, entitled 1845-

—Then and Now—1895. The JOURNAL starts out on its second half century with every augury of continued prosperity and usefulness.

[Illustrated Buffalo Express, August 18, 1895.]

A half-century mark. The August number of the BUFFALO MEDICAL JOURNAL completes the fiftieth year of that publication. An article in the current number, entitled 1845--Then and Now—1895, by Dr. Wm. Warren Potter, is a history of the JOURNAL and of the vicissitudes and progress of medical journalism in Buffalo; of the medical colleges, hospitals and medical societies. It is charmingly written—a true reminiscence, full and adequate as to data, graphic and entertaining. It is enriched with many portraits and other illustrations, and will long be conspicuous for its value among the historical monographs and essays of our home region. It is not often that the secular and the medical press have much to say to each other, or about each other. But this anniversary, and the conspicuous excellence of the work with which the JOURNAL has marked it, make it not only becoming, but a source of pleasure to *The Express*, to offer heartiest congratulations to our contemporary. Fame abides with the memory of the men who founded it; nor are her favors all for the past, for the day of greater things is at hand.

[Medical News.]

The BUFFALO MEDICAL JOURNAL has celebrated its fiftieth anniversary by the issue of a special edition of 128 pages, profusely illustrated, and containing some eighteen original articles, together with a historic review covering the period of its existence, and the usual editorial and other matter.

[The Canadian Practitioner.]

The jubilee number of the BUFFALO MEDICAL JOURNAL, published this month, reflects much credit on both publishers and editors. As we informed our readers in our issue for April, this journal is fifty years old, having been established in 1845 by the late Austin Flint, M. D. It was the first journal established between New York and Cincinnati or St. Louis, and proved a success in all respects in a very short time. The jubilee number contains a very interesting special article, written by Dr. William Warren Potter, giving the history of the JOURNAL for the fifty years, involving, as a matter of course, a history of the medical profession and medical colleges of Buffalo during that period. Again we extend to Dr. Potter our sincere congratulations and best wishes for continued success in the future.

[New York Medical Journal, August 24, 1895.]

The BUFFALO MEDICAL JOURNAL, having completed its fiftieth year, devotes a large part of the current number to an interesting account of its career up to the present time. At the present time, says Dr. Potter in the article referred to, it is the only medical journal published in the area bounded on the north by Toronto, on the east by Rochester, on the south by Pittsburg and on the west by Cleveland and Detroit. As a testimonial to the valued support that the JOURNAL has received from its contributors, subscribers and advertisers, says the writer, it now offers itself in an enlarged form and a new dress, for it well understands that it cannot hope to succeed without the continued favor of the medical profession, which it has enjoyed so long. This is the fiftieth year of its publication. While it is old in years, it must be young in activity, and it proposes to indicate its youthfulness by donning new garments, manifesting new energy, increasing the number of its pages and otherwise improving itself so as to make it worthy to stand in the front rank with the best medical journals in the land. In greater Buffalo there will be a greater BUFFALO MEDICAL JOURNAL. Dr. Potter also refers to the various medical colleges and hospitals, which have been established during the past fifty years in Buffalo. Many excellent illustrations are given and there are two views of the city of Buffalo, showing the marvelous growth that has taken place in the city during half a century. Dr. Potter says that he has tried to give a *résumé* of the salient events of that period, and in the illustrations he has sought to couple the past with the present, and, in some instances, to foreshadow the future.

[Indiana Medical Journal.]

The BUFFALO MEDICAL JOURNAL for August, 1895, is a jubilee number of 128 pages, and numerous half-tones, illustrating the growth of the city and JOURNAL for fifty years. The magazine was owned and edited by Austin Flint from 1845 to 1853, when he accepted the chair of practice in the University of Louisville. The special article, Then and Now, is by the present editor, Dr. Wm. Warren Potter, and is a complete and creditable account of fifty years of medical journalism and professional life in the western metropolis of New York state.

[Hot Springs Medical Journal.]

The jubilee number of the BUFFALO MEDICAL JOURNAL lies before us. It is a beautiful specimen of the printers' art and filled with first-class scientific material. It also gives us the pictures of the editorial workers on the JOURNAL from its foundation. Only one thing is lacking—the genial, warm-hearted and learned editor of today did not put his likeness along with Flint, Miner and Hunt. We wish he had done so.

Book Reviews.

TWENTIETH CENTURY PRACTICE. An International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by THOMAS L. STEDMAN, M. D., New York City. In twenty volumes. Volume III. Occupation Diseases, Drug Habits and Poison. New York: William Wood & Co. 1895.

These volumes are following each other with a rapidity that is commendable and in keeping with the usual promptitude of the celebrated publishers. This volume opens with an article by Norman Kerr, of London, entitled Alcoholism and Drug Habits, which covers the first 137 pages of the book. This eminent author is quite competent to deal with this many-sided subject, and he has done so in this instance with much elaboration and great satisfaction. The insidiousness with which alcohol, opium, cocaine and other inebriating substances creep through the gates and alleys of the body, demands alertness on the part of the physician to detect their destructive influences while yet in their incipiency and before they have done permanent harm, and Dr. Kerr here points out the evils and the way to meet them. He divides inebriate phenomena into two great groups of morbid symptoms. One consists of the toxicating effects produced on body and brain by the injurious influence of the poisonous articles on tissue, organ and function. The other comprises the diseased conditions which, in whole or part, operate in certain individuals to impel them to "take to drink" or to give themselves up to other forms of narcotic or anesthetic indulgence. We have stated the foregoing in the author's own words because its phraseology could not be condensed or changed without doing violence to its clearness.

In dealing with narcomania, which Kerr terms the disease of inebriety, the author furnishes us with a new and expressive term which signifies a mania for intoxication or any intoxicant. This is a great improvement over the term dipsomania which is a misnomer and leads to confusion.

The next subject dealt with is shock and collapse of which George F. Shrady, of New York, is the author. The literature of medicine is constantly increasing in this direction, and we are glad to find a section set apart to its consideration in this volume; but we submit that this article might have been considerably extended with profit. Eugene Boise, of Grand Rapids, has recorded interesting observations that are not referred to in the bibliography or the text.

There is no subject of more interest to the average *voyageur* than seasickness, or naupathia, to which the next section of this work is devoted. The author, Albert L. Gihon, of the U. S. Navy, was a fit person to select to write on this subject since his experience, both on sea and land, for the past forty years is a ripe one

from which to draw conclusions. There are many points in this essay that ought to be understood by the general public, and we think that it would not be out of place to abstract it and publish it as a magazine article. As soon as travelers can be made to understand that seasickness is a neurosis and not a stomach disorder, *per se*, great progress will be made in its prevention. Dr. Gihon says that in his personal experience of forty years in the naval service and on board numerous passenger vessels, on every sea and during some of the most terrible hurricanes and typhoons ever encountered, he has never met with a fatal case, nor one in which death might probably result. Further on Dr. Gihon remarks—we quote *verbatim*: "Nevertheless, something may be done in the way of precaution. The ocean traveler usually prepares for a sea voyage as a bride is gotten ready for marriage, by weeks of anticipatory sur-excitement and bodily fatigue; and just as the young girl starts on a tour in a feverish, asthenic condition demanding rest, quiet and care for its reparation, and wholly unfitted for the performance of those new functions which involve still greater excitement and expenditure of vital force, so does the housewife, exhausted by onerous domestic preparations for departure, after a long period of sewing, shopping, packing and farewell visiting, involving reckless exposure, loss of sleep and irregular meals, undertake to encounter physical environments that may be such as to demand the utmost constitutional vigor. It is little more surprising, therefore, that the offspring of the one should bear the marks of parental infirmity than that the other should become actually and seriously ill. Other imprudents, both men and women, who have been spared physical exhaustion, gorge themselves at the last moment with confectionery or disorder their digestion by injudicious indulgences, which increase their susceptibility to seasickness beyond the power of bromides, choloform or strychnine to overcome." Dr. Gihon then proceeds to explode the theory that seasickness is a good thing to "clear out the system"—a popular notion with nine-tenths of inexperienced ocean travelers. Dr. Gihon has befittingly served the cause of humanity in this essay.

The next section is devoted to a consideration of mountain sickness and is written by Georg von Liebeg, Munich. It is a fit complement to the preceding paper, and should be carefully studie by climatologists and physicians who are consulted with reference to changes of climate or environment for patients.

Osteomalacia is treated of in a short essay by W. T. Councilman, of Boston, and then follow two papers by Dr. Gihon, one on heat-stroke and the other on frost-bite. Dr. Gihon's rhetoric is charming and his papers always prove entertaining and instructive.

We now come to the section devoted to a consideration of the diseases of occupations, by James Hendrie Lloyd, of Philadelphia. This paper shows the chemical, mechanical and atmospheric effect of occupations on the economy and deals with overwork and nerve-

tire as a result. It is a valuable contribution and merits careful reading.

Lastly, the section on poisoning is reached, which is well prepared by Beaumont Small, of Ottawa, and James Stewart, of Montreal. The usual well-arranged index closes this volume.

RELATIONS OF DISEASES OF THE EYE TO GENERAL DISEASES. By MAX KNIES, M. D., Professor Extraordinary at the University of Freiburg. Forming a supplement volume to every manual and text-book of Practical Medicine and Ophthalmology. Edited by Henry D. Noyes, A. M., M. D., Professor of Ophthalmology and Otology in Bellevue Hospital Medical College; Executive Surgeon to the New York Eye and Ear Infirmary; recently President of the American Ophthalmological Society; recently Vice-President of the New York Academy of Medicine; Permanent Member of the New York State Medical Society: Member of the American Medical Association, etc., etc. Octavo, pp. x.—468. New York: William Wood & Co. 1895. Price, cloth, $4.25.

As a scholar and investigator, Prof. Knies has occupied high rank in ophthalmology for many years, and the publication of this masterpiece is hailed with gladness, both in its German and English dress. Very few works have issued from the medical press during the last decade that embody so much painstaking research as this. It covers a field not altogether new, but far from being fully explored. How well it has here been traversed can only be appreciated by a perusal of the volume itself.

The tendency of the profession today is to recognise more and more the intimate relation which exists between the eye and the system at large. That the ophthalmologist and the general practitioner and neurologist must join hands in diagnosis and therapeutics is more fully realised at the present time than ever before. The treatise before us is one of the most helpful contributions toward a proper understanding of ocular and systemic relations, both physiologically and pathologically, that has ever been made.

The book is divided into nine chapters, in which the author sets forth the relation of eye diseases to (1) diseases of the nervous system; (2) diseases of the skin; (3) diseases of the digestive organs; (4) diseases of the respiratory organs; (5) diseases of the circulatory organs; (6) diseases of urinary organs; (7) diseases of the sexual organs; (8) poisons and infectious diseases; (9) constitutional diseases. The first chapter deals with (*a*) the anatomical course of the nerves of the eye; (*b*) the disorders in the domain of the ocular nerves and their central origin; (*c*) the relations between the blood-vessels and the eye; (*d*) the relations between the eye and the lymphatics; and (*e*) individual diseases of the brain, cord and nerves. This chapter is, perhaps, the most interesting of all, and occupies 244 pages, or more than one-half of the book. In the second chapter the effects of erysipelas, eczema, herpes, lupus and other skin affections upon the eye are described. In chapter

third, many eye affections are found to be due to diseases of the digestive apparatus, for example, of the teeth and intestines. Chapter fourth deals with diseases of the respiratory organs, including those of the nose and adjacent cavities, the ear and those of the respiratory tract proper. Diseases of the organs of circulation, treated in chapter fifth, furnish sufficient cause for retinal hemorrhages, inflammations, embolism and other fundus changes; while those of the urinary and sexual organs, dealt with in chapters sixth and seventh, reveal manifold sources of retinal disease and functional eye disturbances in various forms. The eighth and ninth chapters complete the work and occupy 130 pages. Here the general practitioner will find an immense fund of information regarding the effects of drugs and poisons on the eye, and the relation of infectious and constitutional diseases to diseases of the eye.

This most brief outline must suffice to indicate to the reader the extent of this work. It is a veritable storehouse of facts, citations and information, and embodies an invaluable wealth of material. Dr. Noyes has done the American profession an immense service in placing before it an English translation. No physician who desires to keep pace with progress of the age should fail to read it. A. A. H.

A SYSTEM OF SURGERY. By American Authors. Edited by FREDERIC S. DENNIS, M. D., Professor of the Principles and Practice of Surgery, Bellevue Hospital Medical College, New York; President of the American Surgical Association, etc., assisted by John S. Billings, M. D., LL. D., D. C. L., Deputy Surgeon-General, U. S. A. To be completed in four imperial octavo volumes, containing about 900 pages each, with index. Profusely illustrated with figures in colors and in black. Volume I., 870 pages, 422 engravings and two colored plates. Price, per volume, $6,00 in cloth; $7.00 in leather; $8.50 in half morocco, gilt back and top. Full circular free to any address on application to the publishers. Philadelphia: Lea Brothers & Co. 1895.

It affords us genuine satisfaction to place this book in a convenient place on our library table. There is a wholesome "fitness of things" in presenting a work on surgery entirely written by American authors. We take this occasion to congratulate the editor and publishers on the parts they are playing respectively in this enterprise. There is no reason why American surgeons, who are confessedly among the foremost in the world, should not place their stamp upon the literature of surgery in a distinctly national fashion. It is perfectly absurd for Americans to be imbued with the belief that to learn surgery they must go abroad and the present work will do much to neutralise that tendency.

The first section of this book, consisting of 144 pages, is devoted to a consideration of the history and literature of surgery. The work proper opens with a section on surgical pathology, includ-

ing inflammation and repair of wounds, to which 100 pages are devoted. Then follow a section on general bacteriology of surgical infection, to which about ninety pages are allotted. The succeeding chapter, comprising about fifty pages, considers symptoms, diagnosis and treatment of inflammation, abscess, ulcer and gangrene. A chapter of thirty pages is devoted to septicemia, pyemia and poisoned wounds. Traumatic fever, erysipelas and tetanus get brief consideration in the next eighteen pages. Rabies, hydrophobia and lyssa receive treatment in the next twelve pages. A chapter, consisting of seventy pages, is set apart to the consideration of gun-shot wounds. Fractures and dislocations are elaborately dealt with in the next 130 pages. The important subject of anesthesia occupies thirty pages. The technique of antiseptic and aseptic surgery is considered in the next fifty pages. The final section, consisting of 135 pages, is set apart to the consideration of operative surgery. A very complete index of twenty-five pages closes the book.

The following is the list of authors in Volume I.: Herman M. Biggs, John S. Billings, William H. Carmalt, Phineas S. Conner, William T. Councilman, Frederic S. Dennis, A. G. Gerster, Charles B. Vancrede, Stephen Smith, J. Collins Warren, William H. Welch and Horatio C. Wood.

The scope and import of this volume can be understood by the foregoing synopsis. We cannot enter into details, nor is it necessary. This promises to be the best surgical treatise that has been issued by any press or under the direction of any editor up to date. The first volume is of a character to justify this opinion.

HOME TREATMENT FOR CATARRHS AND COLDS. A Handy Guide for the Prevention, Care and Treatment of Catarrhal Troubles, Colds in the Head, Sore Throat, Hay-fever, Hoarseness, Ear Affections, etc. Adapted for use in the household and for vocalists, clergymen, lawyers, actors, lecturers, etc. By LEONARD A. DESSAR, M. D., Visiting Laryngologist to St. Mark's Hospital and to Mt. Sinai Hospital Dispensary, etc., etc. Illustrated. Pp., 118. New York: Home Series Publishing Co. 1894.

This little book is admirably and concisely written. All parts of it can be read by the student and practitioner with advantage, and many parts of it may be recommended to the layman, such as the preventive treatment of colds and other conditions, the care of the mouth and teeth, hints to vocalists and public speakers and hints on the care of the ears. The author must, however, remember that when he has taught a layman the symptoms and treatment of a simple condition he has not taught him how to distinguish it from a more severe and, probably, a very grave condition and that only the most skilful can do this. It is certainly our duty as physicians to teach preventive medicine. The diagnosis and treatment of diseased conditions can only be carried out by the accomplished physician.

The use of this book in a household, correct as it is in all its statements, would, probably, often illustrate the proverb "a little knowledge is a dangerous thing," for the layman would get but half the truth from its pages. The author, for example, gives the symptoms and appearance of the throat in acute tonsillitis without telling the reader that the patient might have diphtheria, and expects that the treatment laid down will be carried out, when it is admitted that these conditions cannot always be distinguished clinically until a bacteriological examination is made of the excretion. W. S. R.

TRANSACTIONS OF THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS. Volume III., for the year 1894. Octavo, pp. 530. Price, cloth, $5.00; half Russia, $6.00. Philadelphia: Wm. J. Dornan, Printer, 1895.

This association annually puts forth a volume that ought to be the pride of every member of the organization. It is our privilege to have access to the annual transactions of most of the national special societies, and, without disparagement to any other, we feel warranted in asserting that there is no superior work done, nor is it published in any better form than by this association.

The book before us, bound in half-Russia with red edges, is decidedly the handsomest volume of society transactions that it has been our privilege to look upon in many a day. Moreover, in turning its pages, its contents proves to be of the highest standard in quality. The papers, for the most part, are upon subjects that are yet more or less in dispute as to essentials in pathology, practice or technique; while the discussions are charmingly vigorous, impersonal and instructive.

A careful examination of the book reveals the work of a marvelously well-disciplined society, consisting of a hundred or more earnest men that are doing a valuable service in the cause of humanity. Membership in such a body is surely an honor that its Fellows ought to bear with dignity and pride, and that ought to stimulate the ambition of every specialist in obstetrics, gynecology and abdominal surgery in America.

The papers herein published have appeared in the special journals, either in full or in abstract, hence need not be referred to here in detail. The volume is handsomely and somewhat profusely illustrated.

THE INTERNATIONAL MEDICAL ANNUAL AND PRACTITIONERS' INDEX. A work of reference for medical practitioners. Thirteenth year. Price, $2.75. New York: E. B. Treat, 5 Cooper Union. Chicago: 199 Clark street. 1895.

The annual for 1895 is in general appearance, style and make-up similar to its predecessors and needs no introduction to the medical public. The new features for 1895 are many and varied, making

it superior to the former volumes. The therapeutic review of the past year and dictionary of new remedies comprise part first. The present status of electro-therapeutics is ably discussed by Dr. A. D. Rockwell, mention being made to the sinusoidal current of D'Arsonval's which possesses greater penetrating power than the Faradic and is attended with less pain. The chapter following on anti-microbic treatment by Prof. Alfred Carter is well written, but the subject is too specialised.

The bulk of the volume is taken up with a dictionary of new treatment in medicine and surgery, written by an able staff of contributors. Among the articles which deserve special praise is that on angio-neuroses, by Ramsay Smith; methodical diagnosis of ear diseases, by J. Dundas Grant; eyesight as influenced by school life, by Simeon Snell, a most admirably written and illustrated paper on school room hygiene; Fredreick's disease, by Hector Mackenzie; idiocy, by G. E. Shuttleworth, including a report of cases of cretinism, treated with thyroid extract; infantile paralysis, with numerous illustrative cases, by Robert Jones, of Liverpool, and John Ridlon, of Chicago; pyorrhea alveolaris, by J. Fitzgerald; and other articles of less extended research and study. The closing chapters on new books, new instruments, hospitals, etc., are brought down to date and are exceedingly convenient. W. C. K.

LABORATORY GUIDE FOR THE BACTERIOLOGIST. By LANGDON FORTHINGHAM, M. D. V., Assistant in Bacteriology and Veterinary Science, Sheffield Scientific School, Yale University. Illustrated. Price, 75c. Philadelphia: W. B. Saunders, 925 Walnut street. 1895.

This small volume has been prepared for the convenience of the bacteriologist. It consists of a compilation of recognised methods and formulas of staining agents, used for the detection of the various forms of bacteria.

A few well executed illustrations are used in explanation of the text. E. W.

PATHOLOGY AND TREATMENT OF DISEASES OF THE SKIN FOR PRACTITIONERS AND STUDENTS. By DR. MORIZ KAPOSI, Professor of Dermatology and Syphilis and Chief of the Clinic and Division for Skin Diseases in the Vienna University. With eighty-four illustrations. Translation of the last German edition under the supervision of James C. Johnson, M. D. Price, muslin, $5.50; leather, $6.50. New York: William Wood & Co., Publishers. 1895.

This work will prove very serviceable, we feel sure, to the American practitioner and may be truly described as a popular text-book, the exponent of the treatment of diseases of the skin as practised at the Vienna School of Dermatology. The author's extensive experience and unrivaled opportunities for the clinical study of the various phases of cutaneous affections has enabled him

to produce a book which is a credit to himself and an honor to the school of which he is the acknowledged head.

The illustrations are graphic and add to the usefulness as well as attractiveness of the volume.

The translation has been most careful and is in every respect a successful one. E. W.

TRANSACTIONS OF THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION. Volume VII. Edited by W. E. B. DAVIS, M. D., Secretary. Published by the Association. Philadelphia: William J. Dornan. 1895.

This book contains the papers read at the seventh session of the association, held at Charleston, S. C., November 13, 14, 15, 1894. It is uniform in style and make-up with the preceding volumes.

Year by year these books, as they are issued, mark the progress of the specialties with which they deal in that portion of the Republic which we technically speak of as the South. There is no more creditable work done by any association of medical men and its published transactions are a credit to its distinguished secretary, whose wisdom in founding the association is accentuated more and more as time advances.

NINTH ANNUAL REPORT of the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania. Clarence M. Busch, State Printer of Pennsylvania. 1894.

This report represents an exhaustive and attractive summary of the proceedings of the state board of health, as well as the report of the secretary as delegate to the international congress of public health and the American public health association, the circulars and forms pertaining to proclamations in case of epidemics, on the care of the eyes and on dairy hygiene being of special interest.

E. W.

BOOKS RECEIVED.

Remote Consequences of Injuries of the Nerves and Their Treatment. An examination of the present condition of wounds received in 1863-65, with additional illustrative cases. By John K. Mitchell, M. D., Assistant Physician to the Orthopedic Hospital and Infirmary for Nervous Diseases, Philadelphia; Lecturer on Physical Diagnosis in the University of Pennsylvania. In one handsome 12mo volume of 233 pages, with twelve illustrations. Cloth, $1.75. Philadelphia: Lea Brothers & Co. 1895.

The Johns Hopkins Hospital Reports. Report in Gynecology, III., Volume IV., Number 7-8. Baltimore: The Johns Hopkins Press. 1895.

A System of Surgery. By American Authors. Edited by Frederic S. Dennis, M, D., Professor of the Principles and Practice of Surgery,

Bellevue Hospital Medical College, New York; President of the American Surgical Association, etc., assisted by John S. Billings, M. D., LL. D., D. C. L., Deputy Surgeon-General, U. S. A. To be completed in four imperial octavo volumes, containing about 900 pages, each with index. Volume II., 915 pages, 515 engravings and ten colored plates. Price, per volume, $6.00 in cloth; $7.00 in leather; $8.50 in half morocco, gilt back and top. Philadelphia: Lea Brothers & Co. 1895.

The History of Prostitution: Its Extent, Causes and Effects throughout the World. By William W. Sanger, M. D., Resident Physician, Blackwell's Island, N. Y. Octavo, pp. 709. New York: The American Medical Press, 816 Broadway. 1895.

Skiascopy and its Practical Application to the Study of Refraction. By Edward Jackson, A. M., M. D., Professor of Diseases of the Eye in the Philadelphia Polyclinic; Surgeon to Wills' Eye Hospital, etc., etc. Pp. 112, with twenty-six illustrations. Price, $1.00. Philadelphia: The Edwards & Docker Co., 518 Minor street. 1895.

A Treatise on the Nervous Diseases of Children, for Physicians and Students. By B. Sachs, M. D., Professor of Mental and Nervous Diseases in the New York Polyclinic; Consulting Neurologist to the Mt. Sinai Hospital; Neurologist to the Montefiore Home for Chronic Invalids; ex-President of the American Neurological Association. One volume, pp. 688, 8vo, illustrated by 169 engravings, in black and color and a colored plate. Muslin, $5.00. New York: William Wood & Company. 1895.

Modern Medicine and Homeopathy. By John B. Roberts, A. M., M. D., ex-President of the Philadelphia County Medical Society and of the Medical Society of the State of Pennsylvania. Cloth, 16mo, pp. 72. Price, 75 cents. Philadelphia: The Edwards & Docker Company, 518-520 Minor street. 1895.

The American Academy of Railway Surgeons. Official report of first meeting held at Chicago, Ill., November 9-10, 1895. Edited by R. Harvey Reed, M. D., Columbus, O. Chicago: American Medical Association Press. 1895.

The Pocket Materia Medica and Therapeutics. A Résumé of the Action and Doses of all Officinal and Non-officinal drugs now in common use. By C. Henri Leonard, A. M., M. D., Professor of the Medical and Surgical Diseases of Women and Clinical Gynecology in the Detroit College of Medicine; Member of the American Medical Association, etc., etc. Second edition, revised and enlarged. Cloth, large 16mo, 367 pages. Price, post-paid, $1.00. Detroit: The Illustrated Medical Journal Co., Publishers. 1895.

Exercise and Food for Pulmonary Invalids. By Charles Denison, A. M., M. D., Denver, Col., Professor of Diseases of the Chest and of Climatology, University of Denver, etc. Price, 35 cents. Denver: The Chain & Hardy Company. 1895.

Formulaire des spécialités pharmaceutiques, composition, indications thérapeutiques, mode d'emploi et dosage, à l'usage des médecins, par le D M. Gautier, ancien interne des hôpitaux, et F. Renault, pharmacien de 1re classe, lauréat de l'École de pharmacie. 1 vol. in-18 de 300 pages, cartonné 3 fr. Librairie J.-B. Baillière et Fils, 19 rue Hautefeuille (près du boulevard Saint-Germain), à Paris. 1895.

Seventeenth Annual Report of the State Board of Health of Illinois. Being for the year ended December 31, 1894. With an appendix containing the official register of physicians and midwives, 1895. Springfield, Ill.; Ed. F. Hartman, State Printer. 1895.

Practical Dietetics with Special Reference to Diet in Disease. By W. Gilman Thompson, M. D., Professor of Materia Medica, Therapeutics and Clinical Medicine in the University of the City of New York; Visiting Physician to the Presbyterian and Bellevue Hospitals, New York. Large 8vo, 800 pages. Illustrated. Prices, cloth, $5.00; sheep, $6.00. Sold by subscription only. New York: D. Appleton & Co., Publishers, 72 Fifth avenue. 1895.

Annual Report of the Department of Health of the City of Chicago for the year ending December 31, 1894. Arthur R. Reynolds, M. D., Commissioner of Health, Chicago. 1895.

The Science and Art of Obstetrics. By Theophilus Parvin, M. D., LL. D., Professor of Obstetrics and the Diseases of Women and Children in Jefferson Medical College, Philadelphia. New (third) edition. In one very handsome 8vo volume of 677 pages, with 267 engravings and two colored plates. Cloth, $4.25; leather, $5.25. Philadelphia: Lea Brothers & Co., Publishers. 1895.

Personal.

Dr. Eugene Smith, professor of ophthalmology in Detroit Medical College, together with his family, has been spending the summer on his farm at Athol Springs, N. Y. Mrs. Smith and the children have returned to Detroit and Dr. Smith will soon follow. They will be greatly missed during the remainder of the season by the Lakeshore summer colony.

Dr. Rufus B. Hall, of Cincinnati, has taken advantage of the vacation season to renovate his private hospital for women, located in that charming suburb, Walnut Hills. This institution is one of the completest of its kind and has a well appointed operating room that is the pride of its owner.

Literary Notes.

The *Buffalo Druggist* is the name of a new journal that has recently appeared. It is published in Buffalo in the interests of pharmacy and the general drug trade and is well edited. In its issue for July, 1895, it published a fine photograph of Dr. Ernest Wende, one of the associate editors of the Buffalo Medical Journal. Dr. Wende's picture is accompanied by an interesting biographical sketch.

THE *Medical and Surgical Reporter* that has been published in Philadelphia since 1853, when it was established by Dr. S. W. Butler, has removed to New York and installed itself in the new Constable building, 109-111 Fifth avenue, corner Eighteenth. Here, both the editorial and business offices will henceforth be located. We are glad to have such an eminently respectable journal, and one so long and permanently established, take up its residence within the borders of the Empire State.

THE *Nashville Journal of Medicine and Surgery*, in its issue for August, appears enlarged in size and with an illuminated cover in commemoration of the founding of the University of Nashville forty-five years ago, and which will move into a handsome new building October 1, 1895.

We beg to tender our most cordial congratulations to our splendid contemporary for the beauty and excellence of its August number.

THE *Atlantic Medical Weekly*, published in Providence, R. I., is one of the sprightliest and best of the weekly medical journals that come to our exchange table. It is distinguished for its original articles, but particularly for its interesting editorial department. It is distinctive in its arrangement of medical news under three several heads—namely, state, American and foreign. We predict a brilliant future for this deserving medical journal.

THE *Woman's Medical Journal* (Toledo, O.), the only woman's medical journal in the world, in its issue for August, 1895, has begun a series of illustrated biographical sketches of the leading women of the medical profession. The first portrait to greet us is that of Dr. Mary A. Spink, of Indianapolis, Ind. If all the women doctors present as handsome an appearance both of healthful and womanly beauty as Dr. Spink, the gallery of portraits will be well worth preserving.

The JOURNAL takes off its hat in its most courteous manner to the *Woman's Medical Journal.*

HALL OF THE COLLEGE OF PHYSICIANS, PHILADELPHIA.—The William F. Jenks memorial prize of $500, under the deed of trust of Mrs. William F. Jenks, has been awarded to A. Brothers, M. D.,

162 Madison street, New York, for the best essay on Infant Mortality During Labor and its Prevention.

The prize committee also reports as highly meritorious the essay on the same subject bearing the motto, *Vade Mecum.*

The writers of the unsuccessful essays can have them returned to any address they may name, by sending it and the motto which distinguished the essay to the chairman of the prize committee; Horace Y. Evans, M. D., College of Physicians, Philadelphia. James V. Ingham, Charles S. Wurts and I. Minis Hays, trustees of the Wm. F. Jenks memorial fund.

KEIL'S MEDICAL, PHARMACEUTICAL AND DENTAL DIRECTORY.—George Keil, 1715 Willington street, Philadelphia, announces the early publication (fourth edition) of the Medical and Dental Register Directory and Intelligencer, for the states of Pennsylvania, New York, New Jersey, Maryland, Delaware and the District of Columbia. It will present not only a complete list of all medical and dental practitioners in the states named, with place and date of graduation, but also lists of professional educational institutions, hospitals, asylums and the like, and will be of much practical value to all members of these professions.

A. L. KOURSH COMPANY, Chicago, publish a complete case recorder for use in general medicine and gynecology, especially adapted to the necessities of physicians, students, dispensaries and hospitals. It is prepared by S. B. Lyon, M. D., and can be had on application to the publishers and remittance of 20 cents for a complete copy, or $1 for separate blanks in blocks of fifty each.

Miscellany.

CARE OF PERSONS FOUND UNCONSCIOUS ON THE STREETS.

THE Medical Society of the County of Kings has issued a circular concerning the care of persons found unconscious on the streets, which contains the following judicious recommendations. It is the hope of the committee making the report that all concerned will coöperate in such a manner as to insure something like concerted action. If this is done, then persons who are rendered unconscious from any cause on the streets or elsewhere, will

receive prompt medical and humane treatment, and will escape the danger of being thrust in a cell as "drunks," and there left to sleep off the supposed debauch, which in no inconsiderable number of cases has proved to be "a sleep that knows no waking."

RECOMMENDATIONS.

1. Whenever a person is found in an unconscious or semi-conscious state on the street or elsewhere, away from his own home, the police, when notified of such case, shall immediately summon medical aid; sending for the ambulance surgeon, or for the police surgeon; or in towns, where there are no such officials, then for the nearest physician, who should be compensated for his services by the authorities.

2. The police shall not decide as to the disposition of such a case, but must await the decision of the ambulance surgeon, police surgeon, or of the physician called and must act in accordance with such decision.

3. A police officer who acts in opposition to such decision should be by the ambulance surgeon, police surgeon, or the physician, reported to the police commissioner, who should subject such officer to discipline, rules governing such cases having previously been made and promulgated.

4. Ambulance surgeons should give prompt and immediate aid to patients found in the condition hitherto described and remove them to the nearest hospital, or to their homes when ascertainable, according as their judgment dictates is the best course to pursue in the interest of the patients. The existence of an alcoholic complication in the case should in nowise adversely influence the surgeon or physician called as to the disposition of the case, as such a complication often renders skilful medical treatment the more imperative.

5. Ambulance surgeons and other medical men brought in contact with cases in which alcoholism is a frequent complication, should be reminded that this condition often renders an immediate diagnosis impossible in the most serious and oftentimes fatal forms of cerebral disease and injury, as well as in other diseased conditions.

6. The examination of ambulance surgeons should include the differential diagnosis of alcoholic coma from other forms of coma, and the various diseases or injuries that may produce a condition simulating alcoholic intoxication.

7. Hospital authorities receiving financial aid from the city should not refuse admittance to patients suffering from supposed

alcoholism, for in so doing they are liable to be contributory to the death of such patients. They should know that if the condition be one of uncomplicated alcoholism, this fact will in a short time be revealed, and other disposition may be subsequently made of the case; while, if the patient is so affected as to need immediate and skilful treatment, his rejection by the hospital authorities may conduce to a fatal result. If they refuse to receive such cases, because complicated with alcoholism, they should be held legally responsible for the results. And, further, if such refusal is persistent after their attention has been called to the matter, the city authorities should strike the name of such hospital from its list of beneficiaries.

8. The municipal authorities should also consider the question of the establishment of a special emergency hospital, or hospitals, conveniently located with reference to the various districts of the city; or a system, similar to that of the Bureau d'Admission in Paris, connected with which there is a special hospital for all cases of alcoholism, or cases complicated with alcoholism, that may occur in the streets of that city. Or the authorities might consider the establishment of a special department in connection with the hospitals of the city, similar to the "alcoholic wards" of Bellevue Hospital, New York, where more than 4,000 alcoholics are annually treated. Such a plan would relieve the general hospitals of the burden of such cases, or compel them to make special provision for their care. Should the existing methods prove inadequate, the committee recommends some such plan as is here outlined.

Mr. J. H. Ullenbruch, manufacturing optician, 274 Main street, Buffalo, has received a large stock of the new combination sterilising thermometer. This instrument ought to be in the hands of every family that has small children. It is especially useful in sterilising milk, which should always be done with bottle-fed children. Mr. Ullenbruch also carries a complete line of the best clinical thermometers, an instrument that is always an important part of a physician's armamentarium.

The King thermometer syringe, illustrated in the July issue of the Journal, has been placed on the market at the net price of $2.00 instead of $2.25 as originally stated. This brings it down to about as low a price as other fountain syringes of the same size and quality and gives the additional advantage of a thermometer attachment.

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Original Communications.

BRUISES OF THE LUNGS.

By JOHN PARMENTER, M. D.,

Professor of anatomy and adjunct professor of clinical surgery, Medical Department, University of Buffalo.

I HAVE been led to select this subject for the reason that the profession has not as clear an understanding of the mechanism and symptomatology of contusions of the lung as the frequency and importance of the condition demands. Our text-books, too, are quite silent upon the subject. We hear constantly of contusions and lacerations of the brain and abdominal viscera, and have a fairly definite idea of them; but, for some reason or another, this knowledge has not extended to similar conditions affecting the lungs. In what I shall have to say upon this subject, I wish it understood that only such cases are in mind in which the thoracic walls remain intact; that is to say, no wound of the thoracic wall together with fracture or dislocation of the ribs; cases, therefore, in which there is no open communication between the point of impact of the acting force and the lesion in the lung.

One is apt to think lightly of a blow upon the chest which inflicts no injury to the chest wall, but when we remember that cases are recorded in which almost no organ has escaped bruise or laceration, including even the pericardium, heart, aorta and esophagus, we are reminded that much serious injury may follow what seems to be a trivial cause.

Before passing to the clinical side of our subject, let us dwell for a short time upon the mechanism and pathological anatomy of this class of injuries. Why does a blow upon the thorax, the chest-wall remaining intact, cause a bruise or laceration of the lung? The chief factor in the production of this kind of injury is,

unquestionably, the elasticity of the thorax wall. Under the pressure of the acting force it is driven against the underlying lung and then rebounds. The amount of elasticity varies with the age, and the like, of the individual and, hence, the degree of force necessary to produce a certain effect also varies. This elasticity alone, however, does not explain why an elastic and mobile organ like the lung is so easily contused. Gosselin, who has added so much to our knowledge of lung injuries, explains the bruises in this way: when a person is about to be hit, by instinctive action he holds his breath, so that, with the glottis closed, the air imprisoned in the lung cannot find exit at the time the blow is received and the lung is to all intents and purposes a solid body, giving resistance to the acting force. This it does not withstand, and ruptures either at the point of impact or at some weak point.

The theory of Peyrot is, to my mind, a more satisfactory and rational one. This author believes that we may regard the lung, throughout its whole external surface, as adherent to the thorax wall by virtue of the pleural space. If a blow infringes upon a point of the thoracic wall, it depresses the same and successively the parietal and the pulmonary layers of the pleura. The remainder of the lung, from its natural adherence to the wall, does not follow the movement. If, now, a part, but little tense naturally, is straightened out under the force, it ruptures. In this way a direct rupture occurs. Indirect ruptures are less easily explained. Large contusions cause more or less pronounced changes in form, so that parts of the lung normally adherent to the thoracic wall tend to become separated from each other. In this way traction is made upon the pulmonary tissue, which results in a tear, the seat of which may be quite distant from the point upon the thoracic wall at which the force acted.

It is not unlikely that when the lung is filled with air it is more easily ruptured, as Gosselin maintains, than when empty; but, in addition, it must be remembered that during effort the lung is also fuller of blood and the delicate membranes in a condition of tension, which makes them more easily ruptured. Other predisposing causes of rupture are tubercular infiltration, tubercular cavities, emphysema, and pulmonary congestion such as occurs in cardiac disease, chronic alcoholism, and the like.

One other fact in the mechanism of these injuries must not be overlooked, and that is, that bruises or lacerations are occasioned in the same way, whether the ribs or costal cartilages are broken or

not, the actual tearing of lung substance by the end of a broken rib excepted. Normally the two layers of the pleura lie in intimate contact with each other. This contact is maintained throughout all phases of the respiratory movements in the fullest inspiration or deepest expiration. When a collection of fluid (blood, serum or pus,) occurs between these pleural layers, a space is formed at the expense of the lung, which now loses its power of expansion in proportion to the size of the space or its contents, which is the same thing. This may go on until the whole pleural cavity is filled with fluid, when naturally the lung has become so compressed that it receives no more air and respiration on the affected side is inhibited. The above mentioned space may be occupied by still another foreign substance, and that is air. In cases like those under consideration, where no external wound leads to the injured lung, air can enter the pleural space by passing from a bronchiole through a laceration in the lung and pulmonary pleura, which communicates with the pleural cavity, of course. The lung immediately collapses and the air in the lung is forced into the same space. Inspiration simply forces more air into the constantly increasing space, until finally the patient becomes nearly or entirely suffocated from pressure upon the contents of the thorax.

When the two layers of the pleura are adherent, the lung cannot collapse, but allows the inspired air to pass through it into the tissues just outside of it, when we have the condition known as emphysema. Of this symptom more will be said later on.

Jobert makes three degrees of bruises:

First degree.—The lung shows small hemorrhagic punctata, resulting from rupture of the capillaries, but the pulmonary tissue itself is not torn.

Second degree.—Beneath the healthy pleura the lung tissue is found to have suffered small ruptures extending to the alveoli and bronchioles, including the vessels about them. From the rupture of the blood-vessels there results small depots of blood scattered here and there.

Third degree.—This includes extensive tears of the lung, bronchi and larger vessels. Bruises of the first and second degrees are usually recovered from. When death does follow, it is due to inflammatory troubles consequent upon the original injury.

In injuries of the third degree, patients often die very rapidly. The bruises and tears may be of any degree, from slight to those

involving the whole lung. There may be only one or many. They may occur in any portion of the lung.

Certain pathological conditions follow bruises of the lung, which need especial emphasis, as they have an important bearing upon the symptomatology and treatment of the same. These are:

Hemothorax.—This occurs frequently. The blood, as before said, is poured out into the pleural space, and its presence there means rupture of the pleura and lung substance and the tearing through of one or more pulmonary vessels.

Pneumothorax.—Pneumothorax is caused in precisely the same way as hemothorax, except that the bronchioles instead of the vessels are the seat of rupture, and air instead of blood is forced into the pleural cavity. As a matter of fact, the two conditions, hemo- and pneumothorax commonly coëxist.

Emphysema.—This results from the combination of a pneumothorax with the wound of the inner wall of the thorax, through which the air in the pleural cavity presses into the tissue underneath the skin covering the chest. It is especially apt to occur in restless patients, where, in holding the breath in anticipating pain, the intrapleural pressure is increased and the contained air driven into the subcutaneous tissues. This continues until the extra- and intrapleural pressure are the same. The emphysema may extend over almost the entire body and cause very remarkable effects in the personal appearance of the patient.

The emphysema may finally extend to the mediastinum and under the pleura of the sound side, when fatal dyspnea may, and often does, ensue. Emphysema may appear immediately after the injury has been received. Under these circumstances it is apt to be speedily fatal. It is due to injury to the root of the lung, that is to say, to rupture of a bronchus, whereby air is immediately forced into the mediastinal space, and thence upward into the neck and face, and exercises deadly pressure from the very beginning.

Symptoms.—These, naturally, vary with the degree of the injury present. In the milder forms of injury, the symptoms are often few and but little pronounced, being limited to a slight dyspnea, increased respiratory frequency, a little pain and somewhat bloody expectoration. Even one or more of these symptoms may be absent, and the diagnosis only be made certain by the appearance of complications which may arise some time after the receipt of the injury.

But let us suppose a graver case. Here we shall find our patient in greater or less shock or even collapse, face pale, pulse small and compressible, respiration short and labored, with marked dyspnea. Profuse hemoptysis is present. Physical examination of the lung reveals sonorous râles, with absence of vesicular murmurs, but with amphoric breathing and occasional metallic tinkling. If to these symptoms we add the enlargement of the injured side, we have a combination of symptoms and signs which indicate the existence of a pneumothorax. This condition may be absent, however, in severe cases where the rupture occurs in and is confined to the central parts of the lungs, under which circumstance the physical signs and symptoms will be those of a cavity.

Emphysema, particularly at the base of the neck, soon appears for reasons already given, and finally in some cases a more or less pronounced hemothorax can be demonstrated. A sign upon which considerable stress has been laid by some authors (notably Morel-Lavallee and P. Reynier,) is that called the *bruit de roue hydraulique* or *de roue de moulin.* It consists of a series of splashing sounds heard in the precardial region and synchronous with the heart-sounds. They resemble those due to the shaking together of air and water and may be so pronounced as to be heard at some distance from the patient. It is apt to disappear when the patient assumes the sitting posture. It is due to the agitation of a collection of air and fluid by the movements of the heart. Such conditions are often fulfilled in hemo-pneumothorax. It is not necessarily a grave symptom and disappears after a few days, as the air becomes absorbed.

COMPLICATIONS.

Bronchitis or Broncho-pneumonia.—This complication appears early; that is, in the first week. It may be very severe and continue for many days—twenty or more.

Traumatic Pneumonia.—This is supposedly induced by an infection which the lung incurs by the bruise. The agent is the pneumococcus of Friedländer. It appears usually between the third and fourth days. It has not the violent onset of a typical frank pneumonia, but begins without any initial chill, in a blind and insidious way. The temperature rarely runs high, seldom exceeding 40 degrees C. It may be benign in character and terminate in from eight to ten days; nevertheless it is often fatal.

Gangrene.—This occurs from an intense inflammation in the contused area. It may be rapid, but is usually quite slow in its

course. Cases have been reported where portions of the lung tissue have been expectorated in a way suggestive of the falling off of a dry scab. Now and then the gangrene becomes general and involves the entire lung.

Pleurisy.—Pleurisy is the most common complication of a bruise of the lung. It may assume various forms and degrees. It may be mild with small effusion, running an ordinary course with ultimate absorption of the fluid, or it may be severe, with an effusion so great as to require tapping. The effusion may become purulent, making a veritable empyema. Putrid pleurisy occurs in certain cases where hemo-pneumothorax is present and, of course, constitutes a grave complication.

Prognosis.—The termination of lung contusions is, naturally, dependent upon the degree of injury and the complications which follow. In general, we may say that recovery follows in almost all cases, even when hemo- and pneumothorax are present, provided the lesions remain aseptic, and they usually do. The course of the convalescence is simple and short, with but little connective tissue formation, and this limited to the immediate region of the injury. Infection through the trachea and bronchi occurs only seldom; but, when it does take place, a purulent pleurisy results, usually severe in character and often fatal.

Given a patient who has escaped death from rupture of some large vessel or some of the important thoracic viscera, our prognosis will depend upon the nature and severity of the inflammatory complications, as above enumerated. These are usually due to infection, and what is vitally important, from the prognostic point of view, for us to remember is that these complications, in their gravest forms, may follow an injury in which the evidences of bruise or laceration of the lung, at the time of accident, were so slight as to render the diagnosis difficult and uncertain.

Furthermore, the existence of certain conditions, such as diabetes, alcoholism, hepatic and renal disease, must be taken into account, inasmuch as they predispose to pulmonary suppuration.

Do bruises of the lung favor the development of pulmonary phthisis? Mendelsshon has published seven cases in which he believes consumption to have been given an impetus in this way. There seems no reason why, in subjects predisposed to tuberculosis, a bruise or laceration may not become the starting point of tubercular infection, just as it certainly does in other portions of the body.

This is an interesting and important question which only the future will determine accurately for us; it, however, needs the careful consideration of the general practitioner and the recording of accurate cases calculated to throw light upon the subject.

TREATMENT.

When the injury is of the graver form, shock, pain, dyspnea and hemorrhage will be the more urgent symptoms that demand relief. For shock, judicious stimulation with hypodermatic injection of brandy and ether, warmth to the body, and the like, will give the best results.

Pain and dyspnea are best mitigated by morphia subcutaneously, in appropriate doses. It often acts in a magical way. Pain is relieved and almost immediately the breathing becomes quiet and regular and the tension in the thorax cavity speedily lessened. Cold in some form or another applied to the chest wall aids in lessening the pain, controlling the hemorrhage and retarding or preventing further pneumothorax and emphysema.

From the very beginning, in even the mild cases, the patient should remain in bed and not be allowed to speak except in monosyllables, and sparingly in these. By such treatment the complications will be lessened, if not prevented, for, as we have already seen, the mildest cases are often succeeded by grave sequelæ. It is not unlikely that negligence of the simple law of rest may frequently be the cause of the serious sequences so often observed.

Hemorrhage.—When it continues and threatens the life of the patient, of course it demands immediate attention. In addition to other measures already recommended, anto-transfusion may be employed with advantage. If bandages are not immediately at hand, as they usually are not, the patient's legs and arms should be elevated until bandages can be applied. The question has been many times raised, whether a more radical treatment for hemorrhage should be instituted, inasmuch as in severe bleeding conservative measures oftentimes seem of little or no value. In other words, are we justified in opening the thorax and searching directly for the bleeding point or points? When we reflect that to locate the source of hemorrhage and to control it when found (if the injured vessel be a large branch of the pulmonary artery) belongs to the class of impossibilities almost, it will, I am sure, be a long

time before surgeons will recommend and practise such radical treatment. If, however, the hemorrhage assumes such proportions as to cause threatening symptoms from pressure, namely, dyspnea and cardiac embarrassment, it is imperative to relieve the condition. This can be safely done by withdrawing, through a medium-sized trocar, as much blood as is necessary to relieve pressure. It is needless to say that this procedure must be conducted under the strictest antiseptic precautions. It often happens that the blood becomes clotted and will not pass through the canula, when we may incise the thorax wall (just as in the operation for empyema) and turn out the necessary amount of blood. The wound should then be thoroughly approximated and an antiseptic dressing applied. Unfortunately this treatment does not always succeed, for upon withdrawal of the blood the pressure upon the ruptured vessel is relieved and the hemorrhage begins anew. The procedure is, therefore, one to be employed only when other treatment has failed and the life of the patient is in imminent jeopardy.

It not unfrequently happens that severe pressure symptoms are caused by air (pneumothorax). When such is the case, paracentesis affords a safe and effectual method of treatment. This may be repeated as often as the pressure symptoms recur, as will be the case until the wound in the lung and pulmonary pleura becomes closed. The danger in severe cases of pneumothorax of pneumonia setting in as a result of the pressure has led some surgeons to practise incision and drainage of the pleural cavity. This, when done antiseptically, is not at all dangerous. It wards off the pneumonia and hastens the closure of the wound between the pleural space and the ruptured bronchiole.

Emphysema sometimes assumes proportions that make it demand surgical intervention. Here the best thing to be done is to make long and deep incisions in different parts of the swollen area, and by judicious pressure of the fingers from the circumference of the area toward the incision opening, to press out the air contained in the tissues.

The treatment of empyema, when it occurs, and of the various other complications already mentioned, will naturally be the same as when they are due to the more common causes. The limits of this paper preclude any further remarks concerning them, nor is it necessary to do so.

519 FRANKLIN STREET.

ALCOHOLISM WITH SUGGESTIONS AS TO TREATMENT —STATISTICS FOR BUFFALO.[1]

BY SIDNEY A. DUNHAM, M. D., Buffalo, N. Y.,
Physician to Lexington Heights Hospital, Department of Alcoholism and Dipsomania.

FROM the police reports we find from 1890 to 1894, inclusive, that there were 33,909 arrests for drunkenness in Buffalo. Of this number of arrests 29,895 were men, 4,014 were women, or an average for each month of 498 men and sixty-six women. During the same period of five years there were 16,213 arrests for disorderly conduct. Of this number 13,480 were men, 2,733 were women, or an average for each month of 224 men and forty-five women. Of those classed under this head, it is safe to say that the majority were drunk as well as disorderly. During the same period 490 were classed under the head of dipsomaniacs and sent to the jail to sober up. The Erie County Penitentiary reports for the five years show that 16,949 men were there for drunkenness and 3,080 women were sent to the same place. While more than one-half of the arrests for drunkenness were sent to the penitentiary, about one-third of those arrested for disorderly conduct were sent also to the penitentiary. One man has a history of being sent to the penitentiary for drunkenness fourteen times in one year and another thirteen times. Of those sent to the jail for dipsomania nineteen were in twice and nine three times.

During this period of five years, reports from the coroner's office show that seventy-nine died from alcoholism, and out of the 221 suicides seventy-three were known to have been hard drinkers. According to French authorities, the preponderate cause of suicide is alcoholism. The reports quoted show that nearly half of the suicides in the city are due, directly or indirectly, to alcoholism; and if a correct history of these cases could always be obtained, there is no doubt that the majority of suicides would be found of that class.

Comparing the small number treated at hospitals, where drink was the cause of their confinement, with those that were retained for punishment, we find that only 264 men and forty-three women were in the Buffalo General Hospital during those five years, and that 169 men and thirty-nine women were at the Buffalo State Hospital or asylum. Probably an equal number were treated at the Sisters' of Charity Hospital. However, the reports show a

1. Read before the Buffalo Academy of Medicine.

very small number receiving treatment for a disease which held these habituates as slaves to appetite.

Dealing with it as a crime against law and order, severe fines and heavy punishments have been applied in all ages. But a very small percentage have been benefited of the large number of those thus treated. Treating it as a disease, the last decade has revolutionised the theories as to the cause, also care, of such maladies, and the progress has been as great in this direction as that which has marked the treatment of many other diseases. Experience teaches us that it is a disease which can be successfully treated, the time and course of treatment depending upon the stage and character of the disease. The treatment of this class of patients has varied from the heroic method of blood-letting in olden times to the empiric method of hypnotic suggestion of the present day.

Like other diseases, dipsomania or chronic alcoholism may be inherited or acquired. In either case the treatment is the same, although the results may be different. The more chronic the case, the more persistent should be the treatment. Habit leads to disease just as exposure leads to rheumatism. The strong-nerved man finds appetite often more than he can overcome. Therefore, we should expect that the one who has inherited a nervous weakness should frequently find accustomed appetites uncontrollable.

Heredity predisposes to dipsomania, the same as it predisposes to consumption. Both are developed under favorable surroundings. Asthma is a neurotic disease, inherited, but there is a climate for every asthmatic. Also, there is a climate for every hard drinker (temperate climate).

How They are Treated at Present.—Medically, the patient is confined to his room, either because he is unable to go out of his own accord or because he is constrained by friends. The physician prescribes medicines to overcome the alarming symptoms, such as uneasiness and sleeplessness, together with a steady withdrawal of stimulants. As soon as the patient talks rationally and walks steadily the physician discharges his patient or the patient discharges his physician. This course of treatment lasts from three days to one week, and is the sum of the entire medical attention the patient receives when he has been suffering from a chronic disease for several years. We need not be surprised that relapses occur very shortly and frequently. No other disease, so grave in character, so dangerous to the community and fatal to the patient, is today treated so carelessly and unscientifically.

Legally, the misdemenant is arrested, spends a night in a cell at the station-house and is fined $5.00 to $10.00 in the morning or an equal number of days at the workhouse. If he be well connected, socially and financially, he may be detained in the jail until his physical and mental condition is sufficiently improved to warrant the authorities in discharging him on the promise that it will be "the last time." When the patient is given an opportunity to go out into the world to do better, it is only a short time ere he finds himself again overcome by his tempter. In those cases where drunkenness is a vice, this treatment is insufficient; and in those where it is a disease, it is cruel and barbarous.

Why They Should be Differently Treated.—Because a careful physical examination reveals lessened nervous energy, weakened cerebral functions, interference with coördination and reflex action, altered secretions and diminished excretions. And further, because a mental examination reveals hallucinations (painful or pleasant), delusions, melancholia, suicidal tendencies, and the like, and shows weakened will power, temporary loss of memory, the finer sensibilities numbed, perceptions and emotions dulled, truth, decency, duty, honor and felicity doubtful or altogether lost. In every case there is evidence of the paralysing effect of alcohol upon the inhibiting power of the brain, which is one of its highest faculties; and herein the greatest damage is wrought and the will undermined.

Again, because the pathology of this disease, in advanced stages, shows degeneration of the nerve tissue, hyperemia of the meninges of the brain, diffused interstitial sclerosis of the cord, with cirrhotic changes of the internal organs.

Charpentier, out of 135 victims of general paresis, found eighty three cases were confirmed alcoholics. He adds alcohol to syphilis and heredity and calls them the triad of general paresis. As in severe forms of indigestion, with altered secretion and functional disturbances, when the *post mortem* shows no pathological changes, so in severe and dangerous forms of alcoholism, with perverted faculties and impulses, the brain itself may reveal no structural changes. Sonderegger considers drunkenness the effect and not the cause of the disease; that it is an irregular development and distribution of the cells through which the will and conscience act.

There are premonitory symptoms in periodic drinkers, such as nervousness, irritable disposition, forgetfulness, deep meditation, poor appetite and sleeplessness. Baker (*Boston Medical and Sur-*

gical Journal) reports a case of hereditary dipsomania, in which the patient, during his craving for alcohol, though prevented from getting it, would become sleepless, lose his appetite, appear silly, incoherent, staggering in gait, with some delusions of persecution manifested. As a patient expressed it to me the other day: "I am in another world during the drinking period."

How They Should be Treated.—From a criminal standpoint, the penalties should be multiplied by ten. It should be 100 days' imprisonment where it is now only ten days. This would give the patient an idea of the gravity of the offense and will also give Nature time in which to gain strength and fortify herself against future temptations and indulgence. While thus restrained, the patient should be kept at light work and receive medical aid for, at least, four weeks, according to the most advanced and successful methods of the present day.

The medical treatment, where it is now continued for about five days on the average, is about one-tenth the time required to materially benefit these cases. The indications to be met generally are largely a disturbance of the nervous system, which manifest themselves in an irritable disposition, sleeplessness, fits of depression, and, later, excitability, with all the phenomena of mania-a-potu. The digestive processes are sluggish and weak in character, the excretions are deficient and there is a general loss of muscular tone.

The excitable stages are best controlled by chloral and bromides; or, when there is much delirium with a strong pulse, hypodermic injections of hydrobromate of hyoscine 1-100th to 1-150th of a grain, to be repeated in six hours, or smaller doses every four hours. Ergotin, added in small doses to the above, will overcome the unpleasant effects of hyoscine with a good result on the cerebral congestion. Stimulants should be rapidly withdrawn, and when given should be administered in milk and other foods, but never should be given clear or "straight." If there is much nausea, it can be controlled by small doses of calomel and bismuth, frequently repeated, with nourishment given a little at a time and often. As soon as the patient is able to take nourishment, it should be fluid in character and large in quantity, highly seasoned. If the bowels are constipated, they should be opened by injections of water and glycerine, when the patient is not able to take alkaline aperients through the stomach in the ordinary manner. An infusion of digitalis, tablespoonful doses, with ten grains of citrate

of potash every four hours, will increase the urinary excretions when they are diminished. Hypodermics of the nitrate or sulphate of strychnine, with a little digitalin, are the best to overcome heart weakness and often relieves the delirium. Mulford's tablets for dipsomania for hypodermic use will be found very serviceable—namely, gold and sodium chloride, 1-24 gr.; strychnine nitrate, 1-60 gr.; nitroglycerin, 1-300 gr.; atropine sulph., 1-200 gr.; digitalin, 1-60 gr.; sodium chloride, $\frac{1}{8}$ gr.

Cold to the head overcomes delirium when due to congestion or active hyperemia of the meninges.

When the acute symptoms have subsided, a three or four weeks' course of curative treatment should begin. A tonic, consisting of nux vomica, hydrastis, capsicum and an infusion of gentian, should be given four times a day and in full doses. Also hypodermics of the chloride of gold in solution—one-tenth of a grain to ten minims of distilled water—should be given three or four times a day.

Tablets of the above formula are good for the first week or ten days, followed by the gold solution. The platinum needle will not corrode by the gold solution and should be used for this reason. The infusion of gentian is used because it contains less alcohol than the tincture.

Because the chloride of gold meets so many indications in the treatment of dipsomania, there is no more reason to call it a "gold cure for dipsomania" than there is to call it a gold cure for consumption, where it has been used with a certain degree of success; or a "gold cure" for rheumatism with deformed joints, where it has been found valuable; or a "gold cure" for paralysis of the insane, where it is one of the most efficacious remedies.

The chloride of gold I consider one of the chief therapeutic agents in the treatment of chronic alcoholism. It has been used in cases of melancholia, hysteria, chorea, and especially nervous troubles due to syphilis. In its physiological action it seems to be a tonic for the brain and spinal cord—an alterative like mercury; it stimulates nutrition and digestion, increases secretions and excretions, and is an aphrodisiac. Its action in this respect is like that of strychnine and phosphorus.

The belief that the impotency for a time following the treatment is due to the chloride of gold, is a delusion on the part of the patient.

Strychnine tones up the nerve centers and the walls of arteries are able to contract to the normal caliber, while muscular fibers return to their healthful response.

If the alcoholic should require both punishment and medicine, as they usually do, the hypodermic method, four times a day, meets the indication beautifully. If the arms swell from the effects of the hypodermics, Goulard's extract will overcome the difficulty.

In some cases, craving for drink can only be removed by treating physical ailments. Lawson Tait reports cases of cure following the removal of the uterine appendages in women. Indigestion is to be treated, neuralgia and nervous exhaustion to be remedied, irregular and weak heart action to be overcome, environment and habits to be changed, syphilis and kidney trouble to receive attention. Irregular hours at meals and for sleep, the futile attempt to drink moderately, old associations in drinking, the intention to drink only beer and cider, all predispose to alcoholic excess in those already habituated to excessive drinking.

Some believe in inebriate asylums under the control of the state. Our insane asylums are just as good, and this class of patients go as willingly to the latter as to the former. The difficulty, at present, with our hospitals is their having no power to hold these patients as long as is required for successful treatment. Every city of the size of Buffalo, showing the amount of alcoholism that Buffalo does, is in need of a hospital for inebriates, endowed with power to retain patients until dismissed as cured. Our present overcrowded penitentiary would be greatly relieved of some of its very heavy burdens, the community better protected and the reformation and cure of the victim would be more pronounced and permanent. I agree with Dr. T. B. Crothers, of Hartford, that public sentiment should not permit one to become an inebriate, or tolerate him after that stage, unless under legal guardianship and restriction, until he recovers.

Our morning justices should impose larger fines for drunkenness, which means longer terms of confinement. Medical treatment should be enforced for not less than four weeks while serving time. Our habitual drinkers who do not voluntarily take treatment should be committed to the asylum until a more suitable institution can be established. The state should arrange for the proper treatment of these cases when in penal institutions. A law is required to meet this end. Every municipality should have this done.

Drunkenness, with beginners, is of so great moment, because of its demoralising effect upon youth, that, to be a preventive, fines must be large in order to be commensurate with the offense. While

there may be a question about the responsibility of acts committed while under the influence of liquor, there is no doubt about the great responsibility of such persons getting drunk as a beginner.

A portion of mankind have proven in the past that they could not drink moderately, and ought not, therefore, to have taken liquor at all, as the first drinks (socially, it may be,) developed the uncontrollable desire which previous to that time had been latent and ought never to have been cultivated.

The moderate drinkers of today are going to furnish us with the dipsomaniacs tomorrow.

Those who have inherited a predisposition to consumption would not hazard their lives by continually nursing and associating with the consumptive. This applies to all those who have inherited irritable, nervous systems and thereby are predisposed to drink.

It is almost impossible to carry out this system of treatment in private practice. It can be more thoroughly done and the psychical effect upon the patient far more beneficial when sent to an institution. The Lexington Heights Hospital of this city has arranged particularly for these cases, and when treated according to this method the results are very satisfactory. Those who manifest a desire to take treatment and admit that they are unable themselves to discontinue the use of liquor, give the highest percentage of cures. Those who receive the least benefit remind one, when asked why they do not take treatment, of Rogers's lines :

"Go ! you may call it madness, folly,
You shall not chase my grief away ;
There's such a joy in melancholy
I would not, if I could, be gay."

The report of two prominent French medical authorities, Brouardel and Bouchet, to the French hygienic government committee, declare that the future belongs to abstemious nations ; that it is not only a social danger everywhere, but that the body and mind of posterity are weakened. My object in presenting this paper is not to stir your emotions and entertain your higher sensibilities for the present, but to appeal to your intellectual, scientific and executive powers for the better treatment and control, in the future, of these victims of habit and disease.

72 West Chippewa Street.

THE VALUE OF ANTISEPTICS IN SURGERY.

BY WILLIAM STANTON, M. D., Varysburg, N. Y.,
Physician to the Wyoming County Hospital.

JULY 10, 1894, Mr. L. was attempting to control a vicious stallion when the beast seized him by his left arm, taking it into his mouth far enough for the incisor teeth to pass beyond and hold the arm in the space between incisors and molars, puncturing it with the canines. Loosening once and tightening again, he inflicted eight punctures, four anteriorly, beginning above at about the space between the insertion of the deltoid and the external border of the biceps and extending downward, nearly following the outer edge of the biceps as it spreads out lower on the arm, the highest two anterior wounds joined, making a wound perhaps one and one-half inches long. The two others were about five-eighths of an inch long and did not differ materially from any punctured wound, and none were more than one-half or five-eighths of an inch deep, as will be shown further on. The posterior wounds, made by the lower canines, were smaller and located over the triceps, averaging about half an inch in length. Hemorrhage was slight.

From the manner of their infliction, their location and the small external openings, the wounds, in and of themselves, could not have been serious. I was absent at the time of the injury, so a non-graduate dressed the wound and continued in attendance until the 14th. His treatment I relate as described by the patient and his family:

A solution, said to contain carbolic acid, was used with a cloth, to wash the arm and wounds sufficiently to remove the fine-cut tobacco which had been applied; a cloth, wide enough to encompass the arm, was then drawn under and held together above by safety pins, so as to be easily opened, to allow the attendants to frequently pour in a little of an "oil carbolic," which he left. Hot steamed bran-bags were wrapped around the arm and renewed hourly for thirty-six hours. Each morning the dressings were opened and by squeezing a cloth wet in a solution, whose nature was not explained, it was allowed to run gently over the wounds and the arm, a little more "oil carbolic" was poured on and the cloth was replaced.

After a time, "proud flesh" began to appear in the largest wound, when a narrow strip of cloth, an ordinary carpet rag, was tied tightly around the arm and the knot was brought over the granulations "to keep them down." July 12th, the family became aware of a bad odor and by the 14th it had become unbearable, no one being able to remain

1. Read and patient exhibited before the Wyoming County Medical Association.

long with the patient at one time. The arm was turning black and producing an abundance of pus, and, in response to anxious inquiries, the attendant calmly explained that the black part would slough off in a few days, that there was always "such a smell to such things," that it was "beginning to run nicely" and that the arm and patient were both "doing as well as could be expected." The patient was taking, every three hours, a capsule containing "caffenol," or some similar powder, two of which remained weighed 18 and 19 grains respectively. The "oil carbolic" appeared like rancid olive oil, revealing no odor or taste of carbolic acid.

July 14th, 10 P. M., I was called to take charge of the case. The patient had been having slight rigors all day; pulse 112 and irregular; temperature 106° F.; tongue swollen and very foul; abdomen tympanitic and tender. His arm lay in a trough, formed by the cloth arranged as described above, and saturated with putrid pus, which was running out at both the top and bottom; his shirt was saturated with the same to nearly the median line, both in front and behind, and on his side had produced an excoriation considerably larger than a silver dollar. A sheet, folded in about sixteen layers, supported his arm. The pus had saturated this, the feather bed and had soaked a patch the size of a tea plate on the mattress. The patient was lying on his back, causing the pus to gravitate posteriorly.

With a 1-2000 solution of corrosive sublimate I washed off the pus and found, with its longest measurement transverse to the arm, a patch of gangrene, six and a half inches long, four inches wide externally, four and a half inches in the median line and three inches wide internally. Under this was a cavity containing fully four ounces of pus, which had burrowed in and between the muscles in all directions from the gangrenous tract. Below, the integument and superficial tissues were loosened nearly to the bend of the elbow. Above they were loosened comparatively little, probably about an inch. Externally, it had lifted the superficial tissues fully two inches beyond the external line of the gangrene. Internally, it had gone through the biceps deeply, leaving a cavity considerably larger than a butternut, uncovering the brachial artery, and posteriorly had worked inside the aponeurosis of the triceps, probably extending from the deep cavity in the biceps, following close to the humerus, thus gaining the upper surface of the fascia, which holding the pus, allowed it to form a cavity in the triceps, extending fully four inches lengthwise of the muscle and about two inches wide. Besides this wholesale destruction of tissue, there were several sinuses, leading in different directions, into which a probe would pass from one to three inches, and in two or three it passed entirely through, emerging at some other point. On the surface, bounding the gangrene on all sides, was an excoriated strip, varying in width from half an inch above to one and one-half and two inches below, while internally and

externally it extended so as to nearly girdle the arm. The hand, forearm, arm and shoulder were greatly swollen, the nails were blue, the hand and forearm pale and quite cold, while above the gangrene were great heat and redness. The axillary glands were somewhat enlarged.

My treatment consisted in first evacuating the pus, irrigating as thoroughly as possible with a hot sublimated solution, 1-2000, using a fountain syringe for the purpose, and inserting rubber drainage-tubes where it seemed necessary, using four, which remained in place an average of four and three-fourths days, the extremes being two and seven. The following day I began cutting away the dead tissues and removed a large portion that day. At the site of the injury the slough only averaged about five-eighths inch in thickness, and after its removal there remained no trace of the original punctures, which proves they were not deep. On removing the slough internally the brachial artery, with its attendant vessels, could be plainly felt and seen near the bottom of the cavity, their sheath covered with shreds of the destroyed tissues and entirely dissected out. The cephalic vein and one or two branches were destroyed and removed with the sloughs, and several small nerves left uncovered were cut away. Poultices of flax seed and charcoal were freely applied. The line of demarkation formed rapidly, allowing quick and complete removal of the slough. The circulation of the forearm and hand improved and the tumefaction of neighboring parts rapidly disappeared. I was never able to find any communication between the cavity in the biceps and that in the triceps, but feel sure it must have existed, for while the drainage-tube in the biceps remained in place the cavity in the triceps gave no trouble ; in fact, I did not realise its proportions until a day or two after removing this tube, when a little increased heat and swelling indicated the need of drainage. I then opened freely, making an incision two inches long through the triceps to the humerus. I got but little pus, but removed several shreds of fascia two and one-half to three and one-half inches long by one-fourth to one-half inch wide. I dusted the wound with powdered charcoal until a clean surface appeared, then used occasionally a little boracic acid, but usually simply cleaned and dressed with rubber protective and absorbent cotton, or sublimated gauze, or both. In seven days we had a healthy granulating surface. The pockets under the superficial tissues soon closed up and the large cavity in the biceps filled very rapidly, granulations first appearing at the bottom, covering up the exposed brachial artery. The hot sublimated irrigations were continued as long as any pockets or sinuses could be found. In two weeks I began skin grafting, placing in all thirty-eight grafts, of which thirty-four lived, being about 89 per cent., and by excluding nine taken from the patient, we have alive twenty-seven of twenty-nine taken from two young men, about 93 per cent. In thirty-four days from my first visit the entire

surface was healed, excepting the incision in the triceps, which had purposely been kept open.

Six hours after my first visit, when you remember his pulse was 112 and his temperature 106°, his pulse had dropped to 86 and his temperature to 101°, and for the next twenty-four hours his pulse ranged from 86 to 100, averaging 92; temperature 101° to 104 3-5°, averaging 102 2-5°. July 16th, the second twenty-four hours, average pulse, 94; temperature 101 4-5°; July 17th, average pulse, 91; temperature 101 1-5°; July 18th, average pulse, 87; temperature 100 4-5°; July 19th and 20th, average pulse, 86; temperature 100°.

From the 20th to the 25th witnessed a steady decline to normal. The tympanites and tenderness gradually disappeared. The tongue cleared off and by the end of the first ten days the patient was much improved and had a good appetite. He complained of very little pain, and my principal medication was quinine and the syrup of the iodide of iron. As antiseptics, I used corrosive sublimate for irrigating and gauze and listerine as deodorizers.

I have brought this case to your attention, believing it to be of value, furnishing, as it does, two such important lessons. First, it shows what serious conditions may follow a slight injury when not properly cared for; and, second, the satisfactory results which may be achieved, even in severe cases, by thorough and careful antiseptic treatment. It is, perhaps, more convincing than a very serious injury which has proper antiseptic treatment from the start. Let me recall to your minds, for example, the terrible injury which many of us witnessed at Warsaw, in which there was such extensive injury to the superficial tissues and cranial viscera, together with a penetrating wound of the anterior fossa through the frontal bone.[1] Recovery, you remember, was rapid under rigid antiseptics. Compare this with the case just reported. Eight little punctures, not averaging over five-eighths of an inch long, piercing no more important structures than the integument, only four days and eight hours without antiseptics and we have twenty-six square inches of surface gangrenous, the odor of putrefaction everywhere and a supply of putrid pus, which, like lava from a live volcano, carried destruction to everything in its way, the arm literally riddled and dissected, a man with septicemia, pyemia and death staring him in the face. But, even at this advanced stage, with such extensive loss of tissue, notice the immediate and wonderful effects of antiseptics. A fall in temperature of 5° in six hours. Actual measurement showed there was no further extension of

1. Dr. Lusk, in *International Journal of Surgery*, December, 1893.

gangrene and in seven days we had in its place a healthy, granulating surface, and in twenty-seven days more, by the aid of grafts, we found the entire twenty-six inches of surface healed.

I believe the original wounds should have healed by first intention and I am satisfied that with one thorough irrigation with hot sublimated water and, possibly, a few stitches followed by one or two intelligent aseptic dressings, they would have healed without loss of tissue or pus.

A NEW METHOD OF STOMACH WASHING.

By JOHN T. PITKIN, M. D., Buffalo, N. Y.

WITHIN the past ten years, I have had occasion to practise stomach washing on between two and three hundred private patients, for (*a*) the removal of catarrhal accumulations; (*b*) undigested food; (*c*) poisonous substances; (*d*) foreign bodies; (*e*) the fermentative mass of cholera infantum and chronic dyspepsia; (*f*) as a hepatic stimulant, by converting the stomach temporarily into a hot water bag; (*g*) in atonic dyspepsia, as a stomachic; (*h*) for diagnostic and prognostic purposes; (*i*) to prepare the stomach for forced alimentation, where there is anorexia or repulsion to taking food, *e. g.*, in neurasthenia.

Instead of employing the ordinary stomach-tube with funnel attachment, the objections to which are manifold and to be given later, I resort to a recurrent method of my own, a description of which may prove of interest. Taking two small-sized semi-elastic pieces of white rubber tubing, one yard in length, I introduce them well back into the pharynx of the recumbent patient (dorsal decubitus), *via* mouth or naries. The patient is requested to make frequent efforts to deglutate, intermitting with long inspirations, while the physician gently but persistently presses the tubes onward and downward until one half of their length has been swallowed.

As a preparatory measure, a ten per cent. solution of cocaine muriate, as spray, or dropped in the naries, may be used to allay any reflex irritability of the parts.

Having successfully inserted the stomach-tubes, a common Davidson or bulb syringe should be attached to the distal end of one tube. Then slowly and carefully inject from one to three pints of very warm water (as hot as can be well borne by the hand of

the operator), that amount representing about the average normal capacity of the stomach. To introduce more fluid will lead to distressing nausea and vomiting, which is to be avoided, as it discomforts the patient and interferes with the proper cleansing of the viscus, for if once the tubes are ejected and the parts made irritable, the complete success of the procedure will have been jeopardised. When, therefore, two to three pints have been intro-

PITKIN—STOMACH WASHING.

duced, disconnect the syringe from the distal end of the tube, lower the same into a proper receptacle, and the contents of the stomach will be siphoned out. While this is taking place, inject through the second tube more fluid until the stomach discharge consists of only the clear injected water.

Should the tube of egress at any time become clogged, reverse the currents or have the patient add to the vis a tergo by taking

a long inspiration. If the mucus accumulations are too viscid to admit of their rapid escape, add liquor calcis to the wash water, one to three, mucine forming a perfect solution with lime water, whereas plain water only holds it in suspension, or forms, at best, a tenacious mixture.

When it becomes desirable to determine the extent of catarrhal disease in a given case, boil the wash water taken from the stomach, which will coagulate the mucus. This can then be separated, collected on a filter, dried and weighed and the result compared with subsequent examinations.

The capacity of the stomach is roughly obtained by noting the maximum amount of injected fluid retainable at any time during the washing, and the degree of acidity by the amount of alkali required to neutralise the same and change the litmus paper reaction from red to blue; lastly, the power of digestion, by feeding the patient who has a cleansed stomach with the chopped white of a hard-boiled egg. Two or three hours later, remove the contents of the stomach, filter the egesta and compare the undigested portion with the amount ingested. More complete methods of analysis, qualitative or quantitative, volumetric and gravometric, can be resorted to in special cases, but, ordinarily, the few simple manipulations given above will suffice.

I prefer the mouth route in willing adults, providing the pharynx is not hypersensitive and the maxillæ and soft parts are intact. With fracture of the jaw, children, hysterical females and intubated patients, the naso-pharynx proves more advantageous, either for cleansing or feeding purposes. By this route, insert a tube in each nostril and proceed as before. Here the patients cannot successfully resist the operator or eject the tubes.

My objections to the established method are: (1) Lack of expelling force, as exemplified by one lady patient complaining that she, much to her mortification, but greatly to her relief, unavoidably vomited a large residue when she reached a certain tree, *en route* home from the doctor's office. (2) Incompleteness of cleansing. After its use, I have immediately employed the recurrent method and found large quantities of mucus and other débris, which it had failed to remove. The residual portion frequently leaves the patient with a sensitive stomach to suffer more or less nausea the remainder of the day. (3) More difficult to perform. I find patients more willing to swallow two small tubes than one which is so much larger. One woman came to me with the

complaint that her family physician had endeavored in vain, for over an hour, to pass down her throat his garden hose. (4) Again, limited space absolutely prohibits its successful performance *via* naso-pharynx.

206 CONNECTICUT STREET.

FLOODING THE URINARY TRACT.[1]

BY B. H. DAGGETT, M. D., Buffalo, N. Y.

IN RESPONSE to your flattering invitation, I am here today to describe and demonstrate a new method of irrigating the bladder without a catheter and without force.

In a paper read before the American Association of Genito-urinary Surgeons, at Washington, June 1, 1894, Dr. G. E. Brewer states that Dr. C. B. Crossfield, in 1792, contributed an article to the *New London Medical Journal*, in which he reported success in irrigating the bladder from the urethral meatus, by means of continuous pressure applied by an ordinary bulb syringe.

In an article contributed to the *Virginia Medical Monthly*, in 1877, Dr. Hunter McGuire reported successful irrigation of the bladder without a catheter, by a similar procedure.

Dr. Brewer states that his attention was called, about three years before, to a report of some experiments by H. Felike, of Budapest, in which Felike demonstrated that the resistance of the urethral compressor muscle can be overcome by the pressure of a column of water from one to three meters in height. Felike places his patients in a horizontal position on a bed or a table. The bladder having been emptied, the nozzle of the syringe is inserted and compressed in the urethral orifice, the fountain is raised to the height of two meters, when the patient is instructed to take one or more deep and rapid inspirations. I quote Dr. Brewer, who recently witnessed this procedure at the clinic of Dr. Felike: "In a few minutes the subject of the experiment would express a desire to urinate, when it would usually be found that the bladder had been completely filled, without the slightest discomfort to the patient and often without his knowledge." If this statement be exact, the foreign bladder differs remarkably from the Yankee organ. I have seldom found that the bladder could be filled com-

1. Read at the regular meeting of the Chemung County Medical Society, at Elmira, August 20, 1895.

pletely before tolerance is established by frequent irrigations, at least in younger men. The majority of patients complain of vesical tenesmus after three or four ounces have passed into the viscus, and insist upon urination. Dilatation of the bladder by hot saline solutions causes, sooner or later, rhythmic movements and clonic contractions.

Any fluid passed into the bladder, whether by force or otherwise, will cause tenesmus and an urgent desire to urinate, long before the bladder is filled, in a majority of cases. The bladder of the hypertrophic prostatic is more tolerant, however, and, in some cases, may be well filled from the first.

The younger men usually feel the passing of the fluid through the deep urethra, and after having once experienced this feeling, they realise that they have acquired the knack of flushing the bladder at will.

In the case of the chronic hypertrophic prostatic, the deep urethra and bladder are less sensitive and only give warning of the passing of the fluid by a desire to urinate after more or less has accumulated in this viscus.

Keys, in the *Annual of the Universal Medical Sciences*, Vol. III., 1892, refers to his experiments with the method of Rona of forcing medicated fluids into the deep urethra for the relief of posterior urethritis, and says his results were poor.

Lydston used forced injections by a bulb syringe, while the patient was straining as if to urinate, and said that the results were not satisfactory.

Janet employed the method proposed by Felike and condemned it, saying that it did harm in cystitis. One can readily believe that the force of a column of water from six to twelve feet in height, producing hydrostatic pressure of from three and one-half to six pounds per square inch, would be traumatically harmful to an inflamed bladder, and scarcely endurable in the normal viscus. The practice of Guion, at the Neckar Hospital, is similar to that of Felike—namely, the use of hydrostatic force, the patient being in the horizontal position, struggling in the throes of forced and frequent inspirations, and possesses no advantage over that other plan of forced injections with a bulb syringe during vesical strain.

These methods of force overcome or tire out the urethral sphincters, and in this way the fluid passes into the bladder with more or less violence. The length of time required for tiring out these muscles varies greatly in different cases and in the same case at dif-

ferent times. These methods often fail entirely in overcoming the resistance of the muscles. The pressure of the water is about half a pound to the square inch for each foot of height—to be more accurate, four and three-fourths pounds for a ten-foot column of water at a temperature of 110 degrees.

From six to ten feet is the height of the volume recommended by Felike. One can readily believe that the impact of a stream of water, under the pressure of three to five pounds of force, passing in jets against the walls of the inflamed viscus, would aggravate and not relieve, and the same reasoning would apply to forced injections by a bulb syringe. For these reasons, probably, the profession has not adopted these methods.

At the regular meeting of the Lake Erie Medical Association, July 15, 1892, I read an article describing a new method of irrigating the deep urethra and bladder without a catheter. I will again describe the technique of this process since doubts of its practicability have been expressed and failures have been reported.

The materials are a three or four quart fountain, five or six feet of rubber tubing, with a shut-off placed near its distal end. The irrigant is water at a temperature of 110 or 112 degrees Fahr., rendered bland by the solution of a little salt, soda, potash, mucilage or some viscid, diffusible substance. The fountain is raised about a foot above the plane of the pelvis and the tube connected with the inlet of the irrigator. Posture is an essential factor in carrying out this procedure. The patient must assume a semi-dorsal position, with the trunk at an angle of about forty-five degrees with the horizontal line. The thighs should be flexed upon the pelvis, thus giving the body a reversed squatting position. This posture gives an almost directly downward course to the fixed urethra. These flexures of the body relax the muscles of the pelvic floor, which in turn, by direct connection, relieve tension of the urethral sphincter. This posture gives the most favorable condition for inducing vermicular rhythmical action of the urethral canal, when a continuous flow of a hot saline fluid at an even temperature, greater than that of the body, is applied.

Civiale observed and noted that the urethral canal would take on a swallowing action.

Rawdon McNamarra, in an article contributed to the *London Medical Press and Circular*, about 1872, maintained that there was a vermicular action bladderward of the urethra. With the patient placed upon the back in a semi-recumbent posture, the limbs flexed

and supported in order to avoid tension, I have noted that instruments would pass the urethra without force, in a regular, gentle, yet quite perceptible hitching motion. This is especially noted when using the bulbous bougie and is more apparent if the rigid instead of the flexible instrument be used.

There would appear to be a ciliary or vibratory motion of the epithelium, or it may be a vermicular motion of the muscles which causes apparently a suction action of the urethral canal, and which probably aids in the retention of the urine. This property of the urethra, whether it be ciliary, vermicular or peristaltic, is especially noticeable in the deep urethra.

The claim that force is not necessary for introducing water into the bladder without a catheter is further demonstrated by the history of the following case:

A man upon whom I had performed an external urethrotomy (perineal section), passed water into his bladder by this method, with the false passage still open, so that in urination about half of this stream passed through the urethral canal, the balance escaping through this false passage. It is evident that this fluid did not gain entrance into the bladder by force, as the fountain was placed but twelve or fourteen inches higher than the position of the bladder, so that the column of water would bear the hydrostatic pressure of less than half a pound to the square inch, which would be lessened by the friction of the water passing through six feet of tubing, further reduced by the outflow in the canula, and still further reduced by the false passage resulting from the urethrotomy which, as stated above, was sufficiently open to draw off about half of the stream in micturition. These two outlets exceed the inlet in bulk, still he passed one-half pint into the bladder.

The fact that water may be passed into the bladder without force is further demonstrated by the following case:

A man 84 years of age, who had not passed a drop of water by normal urination for more than seven months, was brought before me as a test case. My assistant readily passed, by this coaxing method, sixteen ounces of water into the bladder. His inability to urinate was caused by an enlarged prostate.

I have further tested the necessity of force, continuous or otherwise, by closely pushing the wedge-shaped canula into the urethral meatus, where it would be held without compressing the penile organ, without displacement and without urethral leakage, the pendulous penis being held in line with the fixed urethra, and in this way passed fluid into the bladder.

This case illustrates the fact, well known to genito-urinary surgeons, that the bladder of the hypertrophic prostatic is more tolerant than the normal viscus. Its rhythmic action was destroyed; at least it did not respond to dilatation and the presence of the hot saline solution.

It is well known that all the tubular and visceral organs of the body manifest a rhythmic action. The sphincteric movements are tonic and are due to the action of the muscular fibers through their special ganglia.

In an article contributed to the *Medical Bulletin* of Philadelphia for August, 1895, Dr. Ott says, as a result of his experiments, that weak saline solutions over a temperature of seventy degrees Fahr., cause a series of contractions which continue for several hours, in the distended bladder of a cat, and that heat increases these movements; they also continue after the division and destruction of the spinal cord in the lumbar region. Galvanism, directly applied, causes prolonged tonic contractions.

Various remedies were used, both locally and generally, to increase its rhythmic contraction. Ergotin and potash were the most active—potash produced a powerful action on the bladder, even greater than ergot. Ott states: "Hence, in commencing hypertrophy of the prostate, a combination of the soluble potash salts will be a great improvement over the ergot treatment alone."

Ott refers to Sokownin's discovery that the inferior mesenteric ganglion is the seat of reflexes for the bladder, and concludes from his own experiments that the vesical rhythmic movements are due to extra- or intravesical ganglia acting upon the unstriped muscle, and perhaps to the involuntary muscular fiber and to the intravesical ganglia.

Rhythmic action of the urethra is promoted or induced by hot saline irrigation and rhythmic movements are also induced in the bladder after more or less distention by the fluid, so that the rhythmic action of the urethra is followed by that of the bladder after it is distended.

Twenty years ago Gouley experimented with bladder gymnastics, and reported that his results were not satisfactory. His purpose was to dilate contracted bladders by forced injections.

In the *Medical Record* for April 13, 1895, Dr. Fuller, treating of perivesical inflammation and resulting adhesions, says:

For local treatment, bladder gymnastics, so-called, (Daggett, of Buffalo, has written on this form of treatment,) seem to be of some benefit,

though the good derived thereby is generally but temporary. This form of treatment consists of the regular stretching of the bladder walls by the injection into it, under regulated pressure, of a warm, antiseptic fluid.

Doctors Gouley and Fuller attempted stretching of the contracted bladder by force. My proposition was to gently exercise atonic or dilated bladders by passing aseptic fluids without force, to be expelled by normal urination, repeating this process two or three times daily, flushing the bladder three or four times at each séance, as illustrated in Case III. This is a gentle method, continuously exercising the vesical muscular structures for the relief of atonic conditions, and enabling the bladder to promptly and completely expel its contents. I have noted on two occasions, during discussions in the New York Academy of Medicine, reference to the catheterless bladder irrigation, in which the opinion prevailed that the urethral constrictors must be relaxed by continuous force.

Dr. Bauer, of St. Louis, in an article printed in the *Charlotte Medical Journal*, says, referring to posterior urethritis, "so long as a drop of urine is allowed to pass the urethra with pathological force, so long will it be impossible to effectually cure these cases." If pathological force in voiding the urine is harmful, certainly reversing this process and using hydrostatic pressure, or the force of a bulb syringe, during vesical strain must be still more injurious.

The younger men note the passing of the water through the deep urethra, unless it has been made insensitive by instrumentation or chronic disease, but older men do not have this sensation and are warned by the presence of the water in the bladder after it has accumulated in a considerable quantity, causing a desire to urinate, unless the fluid be very warm, when the heat is felt as the water accumulates in that organ.

A suitable device for maintaining this position may be extemporised in any household by using a hip bath, an ordinary bath tub, a rocking or ordinary chair, tilted and blocked, with the lower extremities placed upon a foot rest, or bed, or any convenient support.

If the urethra be permeable, strict compliance with these details will insure success in passing water into any bladder without force, without violence and without a catheter.

As soon as tenesmus is felt, the bladder should be emptied by normal urination, which may be done without changing position,

and this procedure repeated until the water comes clear. There is no force or violence to induce traumatism, and no threat of infection from a catheter. This is really a coaxing process readily learned and applied by the patient himself, and as it brings comfort and relief it is faithfully employed. It is a curious fact that laymen, under verbal or written instructions, readily and successfully apply this method in their own cases, while physicians, owing to preconceived notions or prejudice, often fail in its application.

This plan of irrigation is especially valuable for the treatment of cystitis as well as inflammatory affections of the adnexa of the urinary tract.

It is especially valuable when the inflammation involves the cord and epididymis, conditions in which catheterisation and forced injections are contra-indicated. The following cases will illustrate this point:

CASE I.—P., aged 30 years, had been confined to his room seven and one-half weeks suffering from inflammation of the bladder and posterior urethra and recurring attacks of epididymitis. Irrigation by catheter was employed daily to relieve the urgent symptoms and if it was neglected the temperature of the body would rise. Catheter irrigation kept the inflammation alive. P. was taught the lesson of auto-irrigation and flooded the lower urinary tract by this method. Relief was decided and prompt, and after three days of this treatment he was a convalescent and suffered no relapse. P. had been under the care of a skilful surgeon of Buffalo for nearly two months, who had employed the best known methods of treatment, and it is evident that he could not have been relieved by catheter irrigation. Without the use of this coaxing process a surgical procedure would have been necessary.

CASE II.—H. had suffered from recurring attacks of epididymo-orchiditis, its predisposing cause being a chronic posterior urethritis, the result of gonorrhea. These attacks were alleged to have been induced by unusual physical exertion—excess in diet, or venery. The predisposing cause was constant—namely, a chronic posterior urethritis. Irritant urethral injections had been used which may have acted as an exciting cause of these recurrences. Flushing of the lower urinary tract forestalled any return.

CASE III.—R., 63 years of age, gives the following history of his sufferings: In a mining camp, twenty-three years ago, he had a very severe attack of cystitis caused by drinking alkaline water. He came home on this account, was ill several months and never fully recovered. He had been confined to his room four weeks, drugs failing to bring relief; irrigation by double catheter was employed. Still his condition grew

steadily worse. His attending physician, realising that a crisis was at hand, proposed to call in a surgeon to do cystotomy. R. declined this service and called me to take charge of his case. At this time he presented all the phenomena of septic infection. His urine was strongly alkaline, offensive, depositing one-quarter part, by volume, solid matter, consisting of pus and inflammatory débris. R. readily learned self-irrigation without the catheter and cleared his urine in five days, and was able to attend his office. There still remained a tendency to relapse, which was controlled by irrigation.

It was noted that irrigations not only warded off this tendency, but they also relieved soreness and pain, as he expressed himself were luxurious and enjoyed three times each day. R. would completely empty his bladder as he supposed. The first washing would show straw or amber color, the third would be clear. He passed into his bladder half a pint of hot milk, and maintained that as hot milk was good for sore eyes, therefore it ought to be good for sore bladders. After micturating, he irrigated, and the first washing was very milky, the third showed up clear. These tests indicated residuum which, becoming disturbed, caused cystitis. The prostate is not perceptibly enlarged and he has never had retention. He firmly refused permission to pass the catheter to test the question of residual urine, alleging that he had already suffered sufficiently from the use of that instrument for irrigation.

After doing bladder gymnastics by three daily irrigations for six weeks, it is evident that this viscus is completely evacuated by normal urination, and more than this, the rising stream is ejected with sufficient force to menace facial autonomy. Gymnastics of the lower urinary apparatus had relieved urinary stasis and its ever attending threat.

CASE IV.—B., 20 years old, a railroad fireman, had been confined to his bed five days suffering from prostato-cystitis, caused by gonorrhea, passing thick decomposing urine every ten to fifteen minutes. He succeeded in the second trial in flushing the bladder. The swelling of a prostatic abscess interrupted or blocked deep irrigation for eighteen hours. Immediately following the rupture of the abscess, irrigation was successful and uninterrupted to the end. Pain practically ceased in three days and within a week he could hold his water for six hours. For three days following the rupture he passed masses of macerated blood coagula, which was made possible by flooding the bladder and evacuating its contents by normal urination. Recovery was speedy and complete.

CASE V.—W., 61 years old, a house painter, states that for five years his urine has passed away by dribbling, constantly necessitating the use of protectives. April 20, 1894, he had a severe attack of strangury, and his physician being unable after repeated efforts to pass a catheter, palliated the symptoms by the administration of drugs. W.

continued to suffer from distention and tenesmus. Dr. Stuart was called April 28th, and after making diligent efforts failed to pass a catheter. The case becoming urgent, Dr. Stuart says: "I determined to test the method proposed by Dr. Daggett—namely, relaxation by posture and hot water irrigation. My patient was seated in a low rocking chair, tilted as described in this method, and his legs placed on the tops of two other chairs. The canula was introduced and within a short time he expressed a desire to urinate. The canula was then removed and he passed nearly a pint of fluid. Irrigation was used twice daily for a week, then once daily since that time. Convalescence has been uninterrupted, and his power to void urine has steadily improved. At present W. has no difficulty in urinating, dribbling has ceased and he feels better than for several years past."

CASE VI.—B., 34 years of age, married, consulted me June 28th, stating that he had suffered from inflammation of the urinary tract for nearly two months and had been surfeited with injections and catheter irrigation, that in spite of or in consequence of this treatment the inflammatory affection had extended and involved the left cord and testicle. B. gave a history of urethritis followed by cystitis. At this time he had prostato-cystitis and this inflammatory condition had extended to the left testicle. B. stated that he had been confined to his house three weeks and that his condition had been growing worse. He was instructed to get an irrigating apparatus and begin its use at once. Under this treatment the inflammation steadily subsided and in four days B. was enabled to return to his work. Irrigation, in a week's time, had reduced the inflammatory action so that local treatment by powder insufflation was instituted. B. writes August 5th: "I believe that I am a well man. There is no urethral discharge, the urine is clear and there are no symptoms remaining, thanks to your method or treatment."

IRRIGATION IN CASE OF CHRONIC HYPERTROPHIC PROSTATE.

It is stated that about 33⅓ per cent. of men between the ages of fifty-five and sixty have more or less enlargement of the prostate, and a small percentage of these cases suffer from urinary obstruction and its attendant evils.

Enlargement of the prostate may delay, but will not probibit passing a fluid into the bladder by this process. I have succeeded in passing water into the bladder in cases where the patient was unable to void it without a catheter. I will relate the following case for the purpose of illustrating the use of this method of irrigation in treatment of enlarged prostate.

CASE VII.—A. S., 74 years of age, giving a history of twenty years of suffering from urinary disease, consulted me first June 1, 1894. At

that time he was suffering from inflammation of the bladder, the urine was ammoniacal, the prostate very much enlarged and he was using the catheter every four hours. He manifested the various phenomena of septic infection ; he had suffered greatly from strangury and tenesmus, which had produced prolapse of the bowel ; he had acquired the common habit of those suffering from urinary tension, due to enlarged prostate, of pinching and drawing up the penile organ until the prepuce was notably elongated. The pendulous urethral canal was so narrowed by the results of inflammatory action that a No. 8 American scale catheter could not be introduced without great difficulty. After prescribing appropriate internal treatment S. was taught this method of irrigation, which he learned under my personal supervision at his own home. My next procedure was enlargement of the urethral canal by internal urethrotomy, and S. was instructed to irrigate twice a day and to gradually discontinue the use of the catheter. As the urgent symptoms subsided the catheter was used less and less until it was employed but once a day for the purpose of drawing off residual urine in order that sleep might be uninterrupted. He steadily gained in his ability to pass water without a catheter, and after a few weeks was enabled to pass the night without being called up more than once. He returned to New York the first of September and wrote me that he was better than he had been in forty years. S. had begun catheter life and in spite of all that had been done for him was rapidly getting worse. This method of treatment saved him from a surgical procedure which might have been absolutely necessary to have saved his life. S. continues to use the catheter at bed time to draw off residual urine, but has no tenesmus or other urinary discomfort.

This process bears neither traumatism nor infection, it carries only good will. It decongests, it dehydrates, it cleanses, it purifies, it prevents and blanches inflammatory engorgements, it promotes absorption of inflammatory products. It leaves the full urethral space for voiding clots and other débris, it supplies abundant menstruum for flooding out during urination. There is no catheter wall to prevent fluids reaching and bearing medicament to the entire urethral surface. The patient himself can apply and carry out this treatment at his home—a great convenience for the doctor. Irrigation should not be used in a routine way. The disease or pathological condition should be diagnosticated and its cause sought and removed while symptoms are being palliated.

I have found this method of irrigation efficient in cleansing the urinary ways, maintaining and rendering the urinary secretions aseptic, mechanically useful in promoting urination and thus diminishing the use of the catheter. The catheter should be used only as a

temporary makeshift. Its too frequent use causes impairment of the expulsive powers and its constant use for two years will permanently paralyse the powers of urination.

Diseases of the genito-urinary system of man have been neglected and their therapeutics are not well understood. Diseases of the genito-urinary system of woman have received marvelous surgical attention at the hands of our confrères, the gynecologists, while they, too, have neglected therapeutics.

If I have interested you and added something useful to you in your struggle with these maladies, I have accomplished all that I had hoped.

258 FRANKLIN STREET.

Progress in Medical Science.

NEUROLOGY.

CONDUCTED BY WILLIAM C. KRAUSS, M. D.,
Professor of nervous diseases in the Medical Department of Niagara University, and

JAMES W. PUTNAM, M. D.,
Professor of nervous diseases, Medical Department of the University of Buffalo.

A HUMAN TIMEKEEPER.

DR. L. R. CULBERTSON (*Cincinnati Lancet-Clinic*, August 17, 1895,) narrates the case of a negro who, when asked the time of day, will put his right or left index finger on his temple, think for an instant, and, without looking at a watch or clock, tell the exact time, or, at least, not vary more than ten minutes. On being awakened at night he can tell the time within a minute or two, as was evidenced by the author. When a boy, he was struck on the forehead with a mattock, which left a depression in the frontal bone one-eighth of an inch deep. Although the cicatrix is adherent, he has never had any epileptic attacks, no paralysis or paresis, no loss of mind or memory, was never unconscious nor suffered any ill effects therefrom. He also states that when a boy he would sit and watch the clock a great deal and would walk and count the number of steps and the length of time it took to cover a certain distance. The writer tries to explain this abnormal faculty in one of two ways. First, there may be a small piece of bone pressing on the superior or middle frontal convolution, caus-

ing irritation or over-stimulation of the cortical centers presiding over time; or, secondly, that by practice he has so cultivated the conscious and unconscious cells presiding over time that they are highly developed in this respect. The writer seems more inclined to the latter view, inasmuch as the time center has as yet not been located, and since, by constant stimulation, any one cortical center or group of centers may attain a remarkable development, so, in this case, the noting of time space has developed these centers to a remarkable degree.

TREATMENT OF THE FULGURATING PAINS OF LOCOMOTOR ATAXIA.

BLONDEE (*Revue de Therapeutique*, April, 1895,) describes a novel way of treating these obstinate pains, by the following simple methods: Its *rationale* consists in the elongation of the spinal cord in the canal, without suspension and the danger of luxation that accompanies that method. The patient is told to perform the following exercise each evening before going to sleep: lying flat upon his back on the bed, he should flex his thighs upon the body and the legs upon the thighs, bringing the knees as near as possible to the chin, advancing the head to meet the knees as much as possible. A band is then passed about the neck and beneath the knees, enabling the patient to retain this position for five minutes. It is evident that the cord will be stretched, especially in the region of the dorsal columns of the spinal cord or the diseased portion.

A CONSTANT SIGN IN COMMENCING MENINGITIS.

IN THE July number, 1895, of the *Alienist and Neurologist* is given the following description of a phenomenon observed in the very early stage of meningitis: it consists in the inharmonious movements of the chest and diaphragm. The chest and abdomen must be bared, but not suddenly, or the hyperesthetic skin will take on accidental movements from the action of the air. In the first period of meningitis may be seen irregularity of rhythm and inequality of the amplitude or development of the chest. Another sign is the irregular type of respiration and dissonation of the movements of chest and diaphragm. The respiration is effected by the lower respiratory muscles of the chest. Looking at the umbilical region, instead of the normal elevation, with each inspiration there is either immobility or depression. These movements are not connected with the Cheyne-Stokes type of respiration.

ACONITINE IN NEURALGIA.

HUNSBERGER (*Therapeutic Gazette*, August 15, 1895,) read a paper on the use of aconitine in neuralgias of various kinds before the Pennsylvania State Medical Association, May 23, 1895, and his experiences are most favorable toward the drug. In trigeminal neuralgias the writer believes that surgical interferences are only palliative measures, the apparent good results noted for a short time after the operation being due to the counter-irritation of cutting down to the nerves. Aconitine in 1-200 grain dose every two hours continued for several days had better effect than all other remedies in the writer's hands.

In intercostal and visceral neuralgia, aconitine seems to have a peculiarly good effect, due, in part, to the fact that it does not irritate the digestive tract.

In neuralgia of the sciatic nerves, aconitine should be given in small doses for two consecutive months, and again for the same period after a cessation of two weeks. The writer has treated successfully fifty-seven cases of neuralgia of the various organs and has never seen any bad symptoms follow or any injurious action of the heart produced, the appetite was never diminished, no constipation, no nausea, no dryness of the tongue or throat, or dull headache follow its use—symptoms that follow the use of all preparations containing morphine, atropine and other drugs.

TESTS FOR EARLY LOCOMOTOR ATAXIA.

FOURNIER, (*Medical Herald*,) in giving the points for early recognition of tabes dorsalis, classifies the diagnostic signs as follows: (1) Westphal's symptom is well known; it consists in the abolition of the pro-rotulian reflex, and is present in two-thirds of the cases. (2) Romberg's sign can be thus appreciated: the eye is an indirect regulator of motion; it helps to correct deviations in walking and maintains the equilibrium. When a patient is suspected of incipient ataxy, it will often suffice to make him close his eyes when in the erect position to verify the diagnosis. In a few instances his body will oscillate, and if the malady is somewhat advanced he will be in danger of falling. (3) The "stairs" symptom. One of the first and most constant symptoms of incipient locomotor ataxy is the difficulty with which the patient will descend stairs. If questioned closely on the subject he will say that at the very outset of his malady he was always afraid of falling when coming up stairs. (4) The manner in which a patient

crosses his legs is often significant. In the normal state a man when performing that act lifts one leg simply to the height necessary to pass it over the other, whereas in the affection under consideration he lifts it much higher than necessary, describing a large segment of a circle. (5) Walking at the word of command. The patient seated is told to get up and walk instantly. After rising, he will hesitate as if he wanted to find his equilibrium before setting off. If while in motion he is told to stop short, his body, obeying the impulsation, inclines forward as if about to salute, or, on the contrary, jerks himself backward in order to resist the impulsion forward. (6) The patient is asked to stand on one leg, at first with his eyes open, afterward closed. Although man is not made for this position, yet he can balance himself pretty firmly for a little time. The ataxic will experience a great deal of difficulty, and will instinctively call to aid his other foot, so as not to fall. If his eyes are closed, he will not be able to stand an instant, and if not held would fall heavily to the ground. Such are the symptoms of incipient locomotor ataxy. They will not all be present frequently, but they should be all sought for, in order to avoid an error which might have grave consequences.

NERVE SUTURE.

SINKLER (*Journal of Mental and Nervous Diseases*, June, 1895,) reports a case of injury to the musculo-spiral nerve by a pen knife followed by complete extensor paralysis. Operation three months later by Dr. Keen. The nerve was found to be severed. The end of the nerve was bulbous. The bulb was excised and the extremities united by silk sutures. It was treated for seven months by galvanism before the patient was able to fully extend the fingers and hand.

This case is interesting from two points of view—first, in showing that even after union of the nerve by suture, months of patient work are needed to restore function. The case also illustrated that suture need not be immediate to be effective. This is, of course, well known, as many cases have been reported in which the interval between the injury and the operation was much longer than three months.

REMOVAL OF UTERINE APPENDAGES FOR NERVOUS DISEASE.

THIS subject was recently discussed (*Boston Medical and Surgical Journal*, March 7, 1895,) by Drs. Knapp, Prince, Homans, Edes

and Davenport. The general opinion expressed was that it was extremely doubtful whether disease of the uterus or ovaries ever gave rise to nervous disease without having special symptoms pointing to those organs.

That there was a curative effect in the removal of healthy tubes and ovaries for nervous diseases as claimed by Dr. W. H. Baker was generally denied.

PALMUS.

LANDON CARTER GRAY (*Journal Mental and Nervous Diseases*, May, 1895,) advocates the adoption of this name to designate the French tic convulsive.

He divides it into four types: 1. Facial palmus. 2. General palmus. 3. Acute palmus. 4. General palmus with pseudo-melancholia. The characteristics of palmus are sudden, rapid and shock-like movements.

SPASMODIC TORTICOLLIS WITH CASES.

RICHARDSON and Walton (*American Journal Medical Sciences*, January, 1895,) arrive at the following conclusions:

1. Palliative treatment, whether by drugs, apparatus or electricity, will rarely prove successful in well-established spasmodic torticollis.

2. Massage may prove of value in comparatively recent cases.

3. Resection affords practically the only rational remedy.

4. Operation on the spinal accessory nerve may afford relief, even if other muscles than the sterno-cleido-mastoid are affected; on the other hand, the affection previously limited to the sterno-cleido-mastoid may spread to other muscles in spite of this operation.

5. No fear of disabling paralysis need deter us from recommending operation, as the head can be held erect even after the most extensive resection.

6. The most common combination of spasm is that involving the sterno-mastoid on one side and the posterior rotators on the other, the head being held in the position of sterno-mastoid spasm with the addition of retraction through the greater power of the posterior rotators.

7. It seems advisable in most cases to give preference to the resection of the spinal accessory as the preliminary procedure.

TRAUMATISM AS A CAUSE OF LOCOMOTOR ATAXIA.

PRINCE (*Journal of Mental and Nervous Diseases*, February, 1895,) reports three alleged cases of ataxia of traumatic origin and reviews forty reported cases. These he arranges in three groups.

Group one, twenty-two cases inadmissible on account of triviality of injury, preëxistence of syphilis, long interval between injury and onset of symptoms, or doubtful diagnosis.

Second, group of six cases, which, while traumatism cannot be excluded, still cannot with safety be admitted as credible evidences of a traumatic etiology.

The third group of twelve cases may reasonably be regarded as the result of traumatism, and even in these twelve cases there is not one in which flaws are not found in their histories. Of all the published alleged cases he only finds four to which no specific objection can be raised. He concludes that, taking all the facts into consideration, it would seem that the current view that locomotor ataxia may be caused by traumatism *per se*, irrespective of a direct lesion of the cord, is not sustained by evidence. It is more probable that, when a sclerosis develops after a traumatism, the subject was already doomed to this condition, the process having already begun, and that the traumatism, at most, accelerated the development of the symptoms and, possibly, of the anatomical process.

OBSTETRICS, GYNECOLOGY AND PELVIC SURGERY.

CONDUCTED BY WILLIAM WARREN POTTER, M. D.,

Examiner in obstetrics, New York state medical examining and licensing board; consulting gynecologist to the Buffalo Woman's Hospital.

THE OBSTETRIC BINDER.

WINDMUELLER (*Centralbl. f. Gynäk.*, quoted in *Medical Review*,) recently opened a long and instructive discussion on the management of normal labor and childbed. He had conducted over a thousand labors in private practice alone in the course of thirty years. He wraps flannel around the body, but objects to the abdominal binder, which he finds interferes with the functions of the intestines, checks involution of the uterus, and is in the way during ablution. For the first three days he limits diet to milk, bread and butter, rice, spinach, potatoes and fish. He forbids wine and coffee and believes, with Zweifel, that errors in diet are among the chief causes of prominent abdomen. The

patient is kept on her back for three days, but Windmueller holds that ten days' rest in bed is sufficient. He has had no cases of prominent abdomen in any of his patients even in multiparæ, with the exception of those who had grown fat. In the discussion, several experienced obstetricians differed as to whether prominent abdomen was due to deposit of fat in the parietes after labor, or to distention of intestines which could be controlled by the binder. Many surgeons applied no bandages after abdominal section; but the physiological conditions were not the same as in the puerperium. Schrader and others believed that the binder did more good than harm; he laid great stress on diet in childbed as influencing the future form of the abdomen. All food liable to cause flatulence must be avoided; spinach and potatoes were particularly bad in this respect.

When the pelvis was narrow, or its angle too acute, the chances of the abdomen becoming pendulous after labor were great. To counteract the evil, a good abdominal binder should be worn during the last months of pregnancy. In Japan it was customary for women to wear a binder during the entire second half of gestation. The binder in pregnancy supported the anterior walls, and greatly diminished the chances of parting of the recti.

A FEW POINTS IN OBSTETRICS.

No branch of a physician's practice requires more self-poise, where so many complications arise, commanding our sympathy and demanding our skill, than that of obstetrics, and when disease and death follow a normal case of labor, the cause can be traced to none other than to ignorance or mismanagement.

With these preliminary remarks, Ewing (*Med. Review*, quoted in the *Lancet-Clinic*,) advances a few aphorisms relating to obstetrics.

1. Examine the urine a week or so before the expected confinement. Albumen need not cause alarm, unless present in large quantity, in which case the woman should be restricted to milk diet, given 1-10 grain of sulphate sparteine four times a day, and bowels kept open with cream of tartar, the object being, of course, to relieve congestion of the renal veins.

2. Make no digital examination without first cleansing the hands and nails, together with the external genitals, with a solution of bichloride of mercury (1 to 2,000) and ethereal soap.

3. Empty the rectum thoroughly with an injection of warm water.

4. Make as few examinations as possible during progress of labor, and each time dip the hand first in the antiseptic solution.

5. If the presenting part emerges slowly from the womb, do not allow your impatience to so get the better of your judgment as to induce you to "assist nature" by pulling upon the os. Probably all the deep pathological tears, calling for surgical interference, found on the right and upper anterior sides of the cervix, are caused by the finger of the accoucheur.

CESAREAN SECTION.

We read in the *Dublin Journal of Medical Science* (*Clinique*, St. Louis,) that the first successful case of Cesarean section on the living patient, performed in the three kingdoms, was performed in January, 1738, by a handy-woman, Mary Dunally, with a razor, on Alice Neal, at Charlemont, between Armagh and Dungannon. Twenty-seven days after the operation, the patient was able to attend Armagh market, walking to and from the city with her marketing.

PREGNANCY WITH UNRUPTURED HYMEN.

Guerard (*British Medical Journal*, quoted in *Maryland Medical Journal*,) relates three new cases of pregnancy in which the hymen was persistent. In the first and second there was a protracted second stage due to the resistance of the hymen, which was perfect and very elastic. After a crucial incision the fetus was at once delivered, but in one case the child was lost. In the third case the patient appeared to be in the seventh month of her first pregnancy, and suffered from severe pain in the genital tract. Although she had twice been operated on for atresia of the hymen, the vagina was still closed, by a firm, impermeable and tender membrane. This was excised, the pains disappeared and the pregnancy continued and ended naturally. Guerard notes a case of bifenestrated hymen where the openings barely admitted a hair; yet the patient reached the third month of pregnancy, and abortion was induced in a manner which could not be ascertained. In considering these cases, he notes how the alkaline uterine mucus, poured out during orgasm, protects the spermatozoa from destruction by vaginal mucus.

RECTAL EXAMINATION OF PREGNANT WOMEN.

W. H. BECKMAN (*Shurnal akuocherstwai Shenskich bolesnej*, quoted in the *Med. and Surg. Rep.*,) has tried this method with great success in 100 parturient women, the details of pelvis and cervix being easily made out. The length of the pregnancy and state of the bladder could not be determined in 7 per cent. of the cases, and the fontanelles and sutures could not be felt in 28 per cent., but this was less important, since the position of the fetus could easily be detected by external examination and especially by auscultation. It was always possible to distinguish the occipital from the frontal portion of the head. The advantage of rectal examination is that infection through the genitals is avoided, the only objection being that sometimes examination through the vagina may become necessary, and that infection may occur through the examining finger, though the latter is easily disinfected, since the rectum does not contain specific microbes. The author considers rectal examination of great value to midwives, enabling them to determine if the presence of an obstetrician will be necessary. Zweifel's experience in the Leipzig obstetrical clinic showed that students instructed in this method of examination could determine all the necessary details without recourse to vaginal examination. Ries believes that midwives should be forbidden to make examinations through the vagina, as their duty is only to assist at normal births. Kroenig is inclined to permit vaginal examinations only (1) when it is difficult to determine through the rectum what part of the fetus is presenting; (2) when the midwife is not able to bring about relaxation of the cervix and (3) when the pains last more than two hours.

UNCONTROLLABLE VOMITING OF PREGNANCY.

PUECH (*Mod. Med.*, quoted in *Med. and Surg. Rep.*,) recently introduced a discussion on this question before the Société Obstetricale de France. His patient, a hystero-neurasthenic subject, suffered very early, so he emptied the uterus, by the curette, at the sixth week, without loss of blood. The vomiting at once ceased. Circumstances contraindicated palliatives in this case. Gaulard believed that palliatives should be tried until there was a rise of temperature, which was a dangerous symptom. Charpentier stated that he is now in favor of terminating the pregnancy as early as possible. During the first three months it is easy to get all the ovum away. He now introduces into the uterus a short stick of

solid nitrate of silver, which is left to melt there. But in one case where a practitioner, fearing to use so strong a caustic, introduced a pledget of cotton soaked in 20 per cent. solution of nitrate of silver, the result was prompt and satisfactory. Disproportion between pulse and temperature is a grave symptom. Marduel related a serious case. The patient had an insane blood relation. Bad vomiting set in during her pregnancy. Opium was given, and she then could keep a little food down, but symptoms of abortion appeared, the drug having probably killed the fetus. Partial blindness set in. A laminaria tent was introduced; next day Fochier emptied the uterus under ether. This proceeding proved very difficult, the uterine walls and even the abdominal parieties being bruised. The sickness ceased, but returned on the next day. A trace of albumin was detected in the urine. For a week the patient grew worse, becoming quite blind from retinal hemorrhage and edema around the disc due to cerebral mischief. A blister was applied to the nape. The sight was partly restored, and a few days later the vomiting ceased. Marduel's services were dispensed with too early; he was recalled and found the patient delirious. She died on the same day, nearly a month after the induced abortion. Fochier, in reference to the difficulty of emptying the uterus when he operated in Marduel's case, observed that ether is a good anesthetic for such work. The uterus must be well depressed when the finger is used to empty the uterus, as the placenta is very adherent in these cases.

THE FILLET IN BREECH LABORS.

Bar (*Arch. de Tocol. et de Gynec.*, quoted in *Med. and Surg. Rep.*,) exhibited, at the February meeting of the Paris Obstetrical and Gynecological Society, an infant, aged 2, with a deep scar on the right groin. It limped slightly and the right thigh was four-fifths of an inch short. The mother at its birth was a primipara, aged 39; the child was then very bulky, and the fillet was used, as all other means to deliver the child, especially the forceps, had failed. Bar attributed the shortening to atrophy of the head of the femur following separation of the epiphysis due to the fillet. He exhibited a similar case where he had used the fillet. A deep incised wound lay in the left groin. A crack was heard during the extraction. The wound suppurated and the child died of pneumonia. Charpentier admitted that he had damaged both soft parts and bones even when employing the fillet with the

greatest care. Gueniot always aided the traction of the instrument by passing the hollow of the hand into the concavity of the sacrum and exercising further traction. This provoked uterine efforts. Budin added uterine expression as an aid to the fillet. Porak believed in the application of two fillets, one on each thigh. Maygrier held that the fillet should be used in dorso-anterior, and the forceps in dorso-posterior, positions. By that principle, fractures are avoided. Olivier protected the fillet by enveloping it in a rubber tube. In that way he had always avoided accidents.

BIRTH OF A CHILD WITHOUT RUPTURE OF MEMBRANES.

DR. W. M. MORISON reports a case in the *British Medical Journal*, quoted in *Medical and Surgical Reporter:* The patient was suffering from acute phthisis, with a temperature of about 101°. Two days before parturition she complained of severe diarrhea, which was, however, quickly and easily controlled. Some time before, she miscarried at the fifth month, and a day or two prior to it she had a similar attack of diarrhea, which was but the precursor of a second miscarriage. She was in her seventh month of pregnancy. Her surmise was perfectly correct, as in two days after she complained of some pains in the lower part of the abdomen. I was sent for, and on arriving there found a cyst-like mass protruding from the vagina. The labor was absolutely dry, not a trace of blood was to be seen, and the uterus contracted without any trouble. The recovery from the immediate effects was highly satisfactory, considering the advanced stage of phthisis in which the patient was. The membranes enclosing the fetus were quite intact and contained practically no amniotic fluid. The cord was pulseless and no indication of life in the fetus, which was otherwise a well-developed seven months' growth. The placenta was normally attached and the presentation was a breech. Children born with a "caul," as a condition such as this is called, are, when the child survives, a source of great satisfaction to the parents, especially parents of a superstitious bias, and such are very numerous yet, because of a supposed "luck" which smiles upon the path through life of those who make their entrance into this weary world shrouded in the mysterious garb of the mysterious world from which they come. In premature births, is it not a fact that breech presentations are as numerous, or, at any rate, a more frequent occurrence than at full time?

INDICATIONS FOR INDUCTION OF ABORTION.

DR. JEFFÉ, (*Medicinische Neuigkeiten*, No. 45, 1894; *Pacific Medical Journal*,) from a study of the literature of the last ten years, fixes the indications for inducing abortion as follows:

Absolute Indications.—(1) Uncontrollable vomiting of pregnancy; (2) incarceration of the gravid uterus; (3) obstruction of the pelvic outlet by tumors or exudates; (4) progressive and pernicious anemia; (5) grave chorea.

Relative Indications.—(1) Great contraction of the pelvis with the conjugata vera below 5 cm.; (2) pulmonary emphysema with signs of degeneration of the heart; (3) nephritis; (4) chronic heart disease; (5) other general diseases of the mother which would jeopardise her life at the time of delivery.

He holds that a conjugata vera of 6 cms. and advanced pulmonary tuberculosis should not be regarded as indications for abortion. He does not think it just to sacrifice a future life for one that is "certainly lost."

THE ABSORPTIVE POWER OF THE VAGINA.

FROM a series of experiments conducted upon pregnant and puerperal women, upon those suffering from fever and diseases of the genitalia, and upon women convalescing from hysterectomy, Coen and Levi (*Collegiene Ital. di Litture Sulla Med.*, serie vii., No. 2; *Phil. Polycl.*,) conclude that the vagina undoubtedly has absorptive powers, and that these powers are increased in pregnancy, in the puerperium and in fevers. Among the drugs experimented with, salicylic acid, salol and phenazone were found to be rapidly absorbed; potassium iodid readily, and iodoform in small quantities. One hour after the insertion of a tampon saturated with a 20 per cent. solution of potassium iodid, the urine contained iodin. The absorption was very rapid in fever patients, but unaltered after hysterectomy. To secure rapid absorption of iodoform, the vagina should be insufflated with fresh iodoform, which is then allowed to remain several days. Phenazone appears in the urine in one and a half hours and remains for forty-eight hours. Its antipyretic action, however, is less than when administered by the mouth. Salicylic acid appears in the urine in one hour and persists for twenty-four hours. Salol also appears early and traces of it appear in the urine for some time.

INOPERABLE UTERINE CARCINOMA.

LUCAS, in the *Rev. Int. de Méd. et de Chir. Prat.*, (*Phil. Polycl*, December, 1894,) recommends the following powder for arresting and diminishing the fetid discharge and preventing vulvar and perineal excoriations: Two drams each of benzoin, iodoform and magnesium carbonate. This should be freely applied to the carcinomatous tissue.

METHYL-BLUE IN PRURITUS VULVÆ.

MADDEN (*La Méd. Mod.*, March 9, 1895; *Phil. Polycl.*,) recommends, in pruritus vulvæ, a 10 per cent. lotion of methyl-blue after thorough bathing of the parts in warm water and corrosive sublimate solution (1 to 1000). In addition, he administers internally the same drug in doses of 1½ grains, in capsules, twice or thrice daily. He claims marked improvement under this mode of treatment, but admits that the skin to which the preparation is applied is permanently discolored.

PHENAZONE IN PRURITUS.

BLASCHKO, in 1891, recommended the employment of phenazone internally for the correction of pruritus, either general or local. F. Arnstein (*Gazeta Lekaeska*, No. 48, 94; *Phil. Policl.*,) has adopted this suggestion in his severe cases, with excellent results. The first patient was a young woman, twenty-eight years of age, with pruritus nervosis of three months' standing; the second was a woman of sixty-six years, with chronic pruritis senilis. In both, the itching quickly subsided and in two weeks' time had entirely disappeared. All other known remedies had failed in each instance.

SUDDEN DEATH DURING COITUS.

AT A MEETING of the Biological Society, M. Luys (*La Trib. Méd.*) exhibited sections of the brain of a young officer who died during a coitus which took place after he had dined. The sections revealed the presence of a series of small, sanguineous extravasations, without rupture of the vascular walls, in the substance of the corpus callosum and island of Reil. The speaker alluded to the danger, even in young persons, of cohabitation after a meal.

of vaginismus, or to the minor cases of this complaint, which are commonly sufficiently relieved by the topical application of methylene blue, cocaine, or other local analgesics, confining myself to the etiology and treatment of those graver forms of vaginismus, occasioning dyspareunia, which require more serious remedial measures, I would presume to express my opinion, founded on somewhat extensive experience, that in the great majority of these instances the complaint is not only very intimately connected with the constitutional neurotic temperament generally evinced by such patients, but also that, hardly less frequently, it is also largely ascribable to a special local lesion—namely, an abnormal condition, or neuritis, affecting the trunk or terminal fibrillæ of the pudic nerve, one branch of which supplies the structures in the vicinity of the clitoris, whilst the other, or superficial perineal nerve, is distributed to the labia as well as to the perineum in which its terminal branches ramify.

ROUND ULCER OF THE VAGINA.

Wlodzimicrz Skowronski (*Univ. Med. Mag.*) describes a case of perforating ulcer of the anterior wall of the vagina in a multipara thirty-seven years of age. It was half a centimeter in diameter, rough, with granulating detritus, gray in color and bleeding on touch. The ulcer was extirpated and the wound closed with silver-wire sutures. The patient, who was anemic, improved in health. Microscopical examination showed an absence of mucous membrane, the submucous layer being partly intact. The vessels in the ulcer had coalesced and their walls were thickened. The prognosis in such cases is regarded as unfavorable by the author, on account of the probable recurrence. Should the ulcer extend to any depth, it is likely to cause fistula or fatal hemorrhage. The treatment of neglected cases is difficult and unsatisfactory. The cause, according to Zahn and Browicz, is local atrophy of the blood-vessels.—*Przeglad Lekarski*, No. 37, 1894.

GONOCOCCI IN THE VAGINAL SECRETIONS.

Buttner, in the space of three months, examined fifty-four prostitutes of Dorpat, to ascertain whether or not they were affected with blennorrhagia. Of these, thirty-two were subjected to a semi-weekly examination through the speculum; the other twenty-

two were encountered in the hospital. Of these latter, in only six did microscopic examination show the presence of a blennorrhagia. In eleven of the remaining sixteen, or 68 per cent., bacteriologic examination showed the presence of the gonococcus in the vaginal secretion, and the same result in nine, 28 per cent., of the prostitutes registered by the police. Among the prostitutes under treatment in the hospital, Dr. Buttner made a separate examination of the vaginal secretion, the cervical mucus and the secretion from the urethra. In the eleven women with manifest blennorrhagia he never found the gonococcus in the vaginal secretion. This microbe was found six times in the cervical mucus and the urethral secretion at the same time; four times in the secretion from the urethra only; once in the cervical mucus only. The author concludes that the examination of prostitutes, as it is practised at present, does not give sufficient basis for the establishment of a certain diagnosis.—*Journal American Medical Association.*

IMPREGNATION FROM SEMEN DEPOSITED ON THE VULVA.

Dr. R. C. Longfellow, of Cincinnati, says, (*Lancet-Clinic,*) on January 12, 1891, he was consulted by a gentleman who desired a prescription for a lady friend who had "missed" three menstrual periods. The history of the case pointed to pregnancy, but the lady was indignant and said that this was not possible as no intercourse had taken place. Her friend, however, returned and told the doctor that some three months before he had attempted intercourse, but, that owing to the fact that the attempt caused the lady much pain, he had desisted without having succeeded in introducing his penis into the vagina. An emission of semen upon the vulva occurred, however, and the lady left his office without making any toilet, allowing the semen to remain in the vulva over night. This was the only time that coition had been attempted. The lady was persuaded to allow an examination. The vulva presented a virgin condition, a thin hymen present and the vagina so small as to scarcely admit the finger. The evidences of pregnancy were well marked and early in August she was delivered of a male child.

IMPREGNATION OF ONE SEXUAL PERVERT FEMALE BY ANOTHER.

Dubousset (*Moll's Conträre Sexualempfindung*, quoted in *Medical Standard,*) reports the case of two sexual pervert females which

came under his observation. One of them at length married, but kept up her relations with the other. The unmarried female had an enlarged clitoris by which coitus was performed. The unmarried pervert became pregnant to her own astonishment. The matter was later explained by the admission of the married pervert that, immediately after coitus with her husband, she had indulged with her "friend," who thereby impregnated herself.

PUBLIC HEALTH, HYGIENE AND BACTERIOLOGY.

CONDUCTED BY ERNEST WENDE, M. D.,
Health Commissioner, Buffalo, N. Y.

A HEALTHY COMMUNITY.

BY FRANKLIN C. GRAM, M. D., Registrar of Vital Statistics.

AUGUST, 1895, was the healthiest of any similar month in Buffalo of which we have any record. There were only 444 deaths, with a rate of 15.87, as against 550 for the same month in 1894, when, according to the city directory, there was a difference of 24,020 in the population. This is certainly a remarkable decrease, most of which occurred in children under one year of age, as shown by the following comparative table, the figures being for August, 1895, 1894, 1893 and 1892 respectively :

	1895.	1894.	1893.	1892.
Under one year	154	221	325	356
One to two years	49	61	91	68
Two to three years	16	12	28	21
Three to four years	10	9	6	12
Four to five years	4	7	12	5
Totals under five years	233	310	462	462

The deaths for August for the past five years have been as follows : 1891, deaths, 601, rate, 28.28 ; 1892, deaths, 712, rate, 29.97 ; 1893, deaths, 741, rate, 29.64 ; 1894, deaths, 550, rate, 20.95 ; 1895, deaths, 444, rate, 15.87.

For the adult ages, the difference is comparatively small. Of the total number, 251 were males, 193 females, 150 married and 294 single.

Cholera infantum is the disease which naturally heads the list at this period, having claimed 103 victims as against 126 for the

same month last year. Eight persons died of diphtheria, two of them being adults of twenty and fifty years respectively. Two died of scarlet fever, one of measles, three of pertussis, nine of typhoid fever and thirty-eight of consumption. Of the remainder, twenty-one died of other communicable diseases; fifteen from senile debility; forty-two from perverted or deficient nutrition; fifty-two from diseases of the nervous system; of the circulatory system, twenty; respiratory system, twenty-seven; digestive system, sixty-seven; urinary system, nine; and violence, twenty-seven.

There were ninety-one cases of consumption reported, two of measles, fourteen of scarlet fever, forty-eight of diphtheria and sixty-five of typhoid.

According to the bulletin of the New York State Board of Health for July, which has just been issued, the mortality throughout the state was less than it has been for any July since 1891, the reported number of deaths for 1892, 1893 and 1894 having been respectively 13,555, 12,337 and 12,516, as against 11,681 this year. From diarrheal diseases there were 2,974 deaths, or more than one-fourth of the total deaths from all causes. In the six preceding months there were but 1,286 deaths from this cause, of which one-half occurred in June. One-half of the deaths from all causes occurred under the age of five years, which is below the average for July. Next comes consumption with 1,040 deaths.

The death-rate in some of the cities and towns of the state for July was: Buffalo, 19.08; Rochester, 19.60; Tonawanda, 20.00; North Tonawanda, 32.50; Lockport, 16.50; Niagara Falls, 16.50; Medina, 13.35; Albion, 18.20; Oswego, 10.00; Canandaigua, 21.00; Batavia, 19.92; Dansville, 19.15; Auburn, 15.50; Syracuse, 19.82; Dunkirk, 10.00; Jamestown, 11.00; Olean, 15.00; Hornellsville, 10.10; Elmira, 14.40; Binghamton, 14.25; Saratoga, 22.00; Waterford, 30.00; Rome, 12.00; Utica, 17.30; Schenectady, 18.90; Ogdensburg, 24.00; Watertown, 13.45; Troy, 23.07; Cohoes, 24.30; Albany, 20.25; Yonkers, 27.35; Long Island City, 30.75; Brooklyn, 26.85, and New York, 26.35.

Newton, a city with a population of 19,776, enjoys the distinction of having the highest death-rate of any part of the state—namely, 42.00; and Wappinger Falls, with 3,718 population, has the lowest of 8.00.

AN IMPORTANT POINT IN THE EXAMINATION OF SPUTUM.

By WILLIAM G. BISSELL, M. D.
Bacteriologist, Department of Health, Buffalo, N. Y.

Much has been written as to different modes of procedure in the microscopical examination of sputum for the bacillus tuberculosis, such referring mostly to certain particular methods of staining and not touching on the point to which I wish to draw attention. The ordinary method, perhaps because of its being the easiest and not requiring special apparatus for its completion, of selecting particles to be mounted in tubercular examination is to select the lenticular cheesy masses contained in the sample, if such be present.

Microscopical examination of stained slide mounts of these masses, if the specimen be tubercular, will usually reveal the organism, but frequently will not and therein the difficulty lies.

It is a fact that the absence of the tubercle bacillus in a certain sample of sputum does not prove conclusively that it was from a non-tubercular source, for frequently the tubercular organism is absent from the sputum of consumptives for several days at a time, but the failure to find the organism when it is present seems hardly excusable.

If the technique of the operator is what it should be, and we will assume that it is, and if the bacillus tuberculosis is contained in the sample and yet not shown by examination, the error must lie in the only remaining factor, that is, the method by which the portion to be mounted was selected.

The only reliable method of examining sputum for tubercular infection is to select the portion to be mounted in such a manner as to be sure if the organism is contained in the sample it will be revealed in the mount.

This can be accomplished in the following way: As soon as the sample of sputum is received (and physicians should caution their patients to furnish bronchial and not pharyngeal secretion in a well-stoppered bottle), add to the sample about an equal volume of a 3 per cent. solution of sodium hydrate, shake well the mixture, and place one side to allow sedimentation. After a few hours draw from bottom of the bottle by means of a pipette what sediment may be present and centrifugate this sediment for about three minutes. If the bacillus tuberculosis be contained in the mixture, on centrifugation it will go to the bottom and will

invariably be present in the first mount from the bottom of the tube.

As to methods of staining there are several good ones, but the one in my experience which gives the most uniform results is that of Liehl-Gabbot for cover glass preparation.

Correspondence.

BERLIN LETTER.

Impressions of Professor Martin's Gynecological Clinic.

DOCTOR A. MARTIN, whose father, the celebrated Edward Martin, was for a long period, and to his death, the professor ordinarius of obstetrics and gynecology at the University of Berlin, is a man of between forty-five and fifty years of age, six feet in height, very corpulent, weighing in the neighborhood of 300 pounds. He has a high forehead, full beard, a stern expression and is of domineering manner. Besides his native tongue, he speaks English, French and Italian fluently. He has the title of professor extraordinarius of obstetrics and gynecology at the University of Berlin, and during the year gives numerous post-graduate courses in diagnostic and operative gynecology.

During the course, all the students taking it are privileged and expected to attend all the operations at his private hospital. This is a very large, substantial brick structure, located in the central portion of the city. There are forty beds, divided into first, second and third class.

Professor Martin derives very much of his operative material from the "Poliklinik," which is situated in the lower portion of the building.

LAPARATOMIES.

The operating room in which abdominal sections are performed is very small. Previous to the operation in the evening and early morning, it is thoroughly cleaned and the walls are saturated with a continuous carbolic acid spray.

Prof. Martin and his assistants, during the abdominal work, wear duck trousers, light shirts and rubber boots. Precisely at

eight o'clock in the morning the patient, previously prepared, is brought stripped into the room and placed upon the operating table. This table, as well as many instruments used by Martin, was devised by Frau E. Horn, who has charge of the hospital and assists him in all his work.

The patient is placed in the lithotomy position. The table is low and short. Martin, wearing a huge rubber apron, sits at its lower end, the legs of the patient resting in his lap so that he is seated between them. Dr. Orthman, the first assistant, sits at the right of Martin; Frau Horn, having charge of the instruments, ligatures and sponges, stands at Martin's left.

Chloroform, made by Salamon & Co., England, is always used. There is continually at hand and ready for use an oxygen inhalation apparatus, and in one case it was to my knowledge used to great advantage.

The incision varies as the case requires. No hemostatic is used, for the parts are compressed digitally by Dr. Orthman, who also forces the intestines from the field of operation. For hemorrhage into the peritoneal cavity aseptic sponges are used. All ligatures are tied with catgut. The stumps are never treated with the Paquelen cautery.

Before closing the wound, a sterilised sponge, saturated with fresh neutral olive oil, is placed into the peritoneal cavity so as to prevent the formation of adhesions, and prior to suturing the abdominal wall the sponge is removed and the excess of oil, as well as air and any remaining clots or coagula, are expelled by manual compression. The abdominal wall and peritoneum are sutured with two to three stay sutures of heavy braided silk and intermediate catgut sutures.

If in any of his operations Martin finds pus he does not use drainage of any kind, claiming that anything, be it a tube or gauze used for this purpose, acts as a foreign body to the tissues, and, because of the irritation resulting, produces a secretion. He has good results by his method, which is, after thorough cleansing of a pus cavity, closing the wound as any other, and depending on phagocytosis for absorption.

The Trendelenberg position is never used, for, as previously noted, Martin always sits during the laparatomies.

The dressing of the wound is very simple; sterilised absorbent cotton, kept in place by strips of adhesive plaster, over which there is wound a roller gauze bandage.

OPERATIONS OTHER THAN ABDOMINAL SECTIONS.

The plastic operations and vaginal hysterectomies are performed in another operating-room. The patient is placed in the lithotomy position, and the Simons speculum is used exclusively; an assistant on either side holding a leg and a retractor.

Emmet's trachelorrhaphy and Martin's perineorrhaphy are performed frequently. If there is a small ovarian cyst, hematoma or sacto salpinx serosa, hemorrhagica or purulenta, without too many adhesions, he removes them by a corporotomy. For retroflections or retroversions requiring operative interference, Professor Martin performs, instead of the Alexander operation or ventral hysterorrhaphy, a vaginal fixation, by which the corpus uteri is sutured to the anterior vaginal wall. This operation was described with excellent results by both Mackenrodt and Dührssen, of Berlin, and is now frequently used at the various gynecological clinics in Berlin and Vienna.

Again, in all these operations, catgut only is used. For a dressing, in these cases, small strips of iodoform gauze are placed into the vagina. No outer dressing is used; the thighs are tied.

Of interest in the preparation of the vagina before operation is the fact that the vagina is not only washed with soap and water, then irrigated with 1-2000 mercuric chlorid, and absolute alcohol, but that it is packed on the night previous to the day of operation with 1-2000 mercuric chlorid gauze, this packing being renewed in the morning two hours before operation.

Professor Martin prefers, whenever he can do it, vaginal hysterectomy to the abdominal method, for he cannot overcome the great danger of ventral hernia which laparatomies have in general.

Interesting from a bacteriological point of view is the preparation of the culture medium used at the Martin Hospital. Through the courtesy of Doctor Kiever, one of the assistants, I am allowed to present the method. Ascitic fluid, be it from hepatic cirrhosis, tubercular or carcinomatous peritonitis, is used. The ascitic fluid from carcinomatous peritonitis is the most advantageous, for it contains the greatest amount of albumin.

The fluid is taken unfiltered and sterilised for six to eight days by fractional sterilisation at a temperature of 63° C. An equal amount of sterilised agar agar is then added to it. The culture medium is poured into Petri vessels and is ready for use.

Through the kindness of Frau E. Horn I am enabled to give the method of preparation of catgut, which is used with such excellent results at the hospital.

The catgut is made by Marke-Weimar and is to be had from Boehme, in Berlin. It is wound on glass plates and then placed for six hours (no longer, else it becomes brittle and breaks,) in a one to one thousand (1–1000) mercuric chloride solution. It is then placed into a solution of one part juniper oil and two parts absolute alcohol, in which it remains twelve hours. This dehydrates and removes the fat from the catgut. Another similar solution—one part juniper oil and two parts absolute alcohol—is made and the catgut placed into it, remaining for at least fourteen days before use. It should be kept immersed in a glass-stoppered jar. In this process the catgut is not boiled and therefore does not soften.

Too much praise cannot be bestowed on Frau E. Horn. She is an admirable assistant, is very alert and knows every step of all operations, so that Professor Martin is never compelled to speak or beckon for anything during his operative work. Having from her childhood been reared in environments where she saw the nursing of the sick and wounded, it remained for the breaking out of hostilities of the Franco-Prussian war to decide her, then in her eighteenth year, to undertake her life-work. She served as volunteer nurse throughout the war, and at its close entered the "Frauen klinik" under Professor Schrödter. She soon left this position and for the past seventeen years has associated herself as assistant to Professor Martin. She is in the neighborhood of forty-five years of age, is plump, has a merry face, a twinkling eye, an all-round comfortable manner, and is always ready for a smile. She does her work not out of necessity, but wholly because of the satisfaction, pleasure and joy which it gives her. She is a very practical woman and, as previously stated, has devised the operating table sold under her name, many instruments and the method of preparation of catgut, decribed above. She is a woman of great wealth and possesses a castle at Eberswalde, which is a beautiful town in the "Marksche Schweiz," about one hour's railway ride from Berlin.

On a Saturday evening, when finished with her week's work, she seeks the quiet and solitude of her charming estate. It is then, as she says, "I live," but early on the following Monday morning she is busy at her accustomed work again.

JULIUS ULLMAN, M. D.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

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THE NOISE NUISANCE AGAIN.

WE HAVE, on several occasions, called attention in these columns to the influence upon health of a class of noises that is as unnecessary as it is exasperating, as well as unhealthful. We return to the subject, because we feel it a duty to point out to the municipal authorities, from time to time, whatever is being permitted, either through neglect or indifference, to interfere with the health, comfort or happiness of our citizens. The rapid growth of Buffalo during the past ten years, with the prospect of a still greater increase during the next decade, makes it all the more necessary to reduce the noises connected with traffic to a minimum and to suppress all such as are unnecessary.

The fog-horn, that for two years played havoc with health and comfort, has been checked in its riotous and unseemly course, until now it falls within the range of toleration. We believe this modified screeching of the fog-whistle has been brought about through the timely offices of Mayor Jewett. We trust that he will address himself with equally satisfactory results to the steam-whistle nuisance, which is getting beyond the range of toleration.

The mayor's kind offices may, with propriety, begin by suppressing the whistle of the police boat, which comes nearer, if tradition is to be relied upon, to the noise of an infernal machine than anything yet invented. This whistle is so absolutely and totally unnecessary, that it should be stopped at once, and in this case the mayor possesses the power to act and to succeed.

The screeching of factory whistles and the tooting of locomotives is a matter that may properly fall within the province of the mayor to control, and we have no doubt it could be done by means of a circular letter addressed to the offenders. Factory whistles

ness of prevention is in itself a solace of tolerance. The man who can sleep peacefully through a rattling thunder-storm loses all somnolent composure while his neighbor is filling a bath-tub, or noisily tumbling over bedroom furniture. The traveler who could composedly sleep in the berth of a limited express train would suffer the wicked suggestiveness of infant mortality while listening to the wakeful cry of a restless baby.

Strange to say, however, all these disturbers of the peace, with much show of injured innocence, are ever ready to act upon the defensive in what they consider their rights and privileges. The struggle of the brass band to maintain its boisterous hold on the street curb is still fresh in the mind of the long-suffering New Yorker. Luckily for the latter, the stuttering voice of the brazen funnel is relegated to "innocuous desuetude." Many of the street cries have been abolished after similar struggles in the cause of quiet-loving persons. Let us hope that many more reforms will follow in their wake.

It is unnecessary to allude to the widespread evil effects of noise upon the public health. If the accumulated agony of irritability could find a common voice it would dangerously jar the equilibrium of the public peace. The only mercy is that it has so many different vents through the thousand channels of individual protests that a general explosion of wrath is thereby averted. Appeals are often made to the health board for the suppression of such noises as may be construed as prejudicial to health. Practically all unnecessary noises are such, although the police catalogue places many under the designation of disorderly ones. The difficulties in the way of deciding which is which are not few. The health department, with all its arbitrary power, cannot seemingly make a politic distinction. This was shown in the case of the cruel pianist and the dying judge. Perhaps some day a proper test case may be brought for adjudication, but hardly until some enterprising neurologist can locate the noise-center and conclusively prove the direct causes of its premature exhaustion.

This subject has been further dealt with in an able manner by Dr. Augustus P. Clarke, of Cambridge, Mass., in a paper read before the section on state medicine at the Baltimore meeting of the American Medical Association, and which is published in the issue of September 14, 1895, of the association's journal. Every student of this subject should give this paper a careful reading.

The mayor of Buffalo, General Edgar B. Jewett, is a man of discipline both by education and training. It is within his province, through suggestion, advice or insistence, to modify or suppress many of the unnecessary noises that disturb, irritate or endanger many invalids. These noises also serve to drive from our prosperous city many persons of wealth who desire to live in

comfort, or prevent others from locating within its boundaries. Let the mayor and the board of health conjointly take hold of this matter and see what can be done to bring relief.

PUBLIC BATHS.

THE important part that cleanliness plays in the prevention of disease is recognised by every true physician. This is an inner truth that has only lately been recognised by statute. The last legislature of this state passed an act providing for the establishment of public baths and lavatories in all large cities, to be maintained in such numbers as the local board of health may determine to be requisite. This legislation was procured through the efforts of a sub-committee of the committee of seventy of New York city. We doubt if the importance of this law is appreciated by the public in general. The law makes it mandatory upon the board of health to determine as to the necessity of public bath houses, their location and number, as well as all essential details. The city authorities are then expected and required to furnish the necessary money to push forward the work to prompt and efficient completion. The responsibility of boards of health in this matter admittedly is very great, but they do not shrink from it.

In Buffalo, the board of health has already taken the proper initiative action to comply with this wholesome law, and the responsibility now lies with the common council to appropriate money with which to finish the good work. If this august body of statesmen should be slow, or niggardly, or captious in performing its part, the people will be pretty sure to call them to an account with a rapidity that may astonish them.

The idea of free public bath houses surely commends itself to all philanthropic and right-thinking people. The government has established them at Hot Springs, Ark., where their beneficial influences in the treatment of disease are recognised as well as their cleanly effects. All over the world they are exerting an influence for good. A clean man is not apt to be a bad man. Let Buffalo proceed to array herself in the front rank of this much needed reform.

TOPICS OF THE MONTH.

WITHIN the mystic realm of that eminently scientific no-code organization, known as the Mississippi Valley Medical Association, there is a social club which is recognised everywhere by the euphe-

mystic title of Chutmucks. Membership in this latter club can only be obtained through the gateway of the former mentioned body. The meetings of both are held once a year, and the Chutmucks are in perpetual session from the opening to the close of the medical society of which they form so important a counterpart.

The proceedings at the late meeting in Detroit, in so far as the Chutmucks were concerned, were varied from the common in a most pleasant manner, which we may best describe by quoting the report as published in the *New York Medical Journal:*

THE CHIEF OF THE "CHUTMUCKS."—Dr. Isaac N. Love, of St. Louis, is recognised as the chief of a semi-organised social coterie known as the "Chutmucks." Among his peculiarities has heretofore been that of not carrying a watch; to use his own words, he would not be "a slave to time." Time has been called on him, however, and he now carries a watch that was given to him in Detroit last week, during the meeting of the Mississippi Valley Medical Association. Among other inscriptions, the watch bears this: "To the Chief of the Chutmucks, from his Loyal Braves." On the occasion of the presentation, speeches were made by Dr. Charles A. L. Reed, of Cincinnati, and Mr. William J. Evans, of New York. Mr. Evans is reported in the *Detroit Free Press* as having said:

"Those who do not know, and do not know that they do not know, these are fools; leave them. Those who do not know and know that they do not know, these are children; teach them. Those who know and do not know that they know, these are asleep; arouse them. Those who know and know that they know, these are wise; follow them. Tonight, gentlemen, we are assembled to honor one who knows, one who makes men friends and women sweethearts; one who is the daily mirror of a broad fraternal love, a man who, having crossed the ocean with unequaled gifts as a gentleman, a scholar and a Chutmuck, saw, heard and felt those things which go to make the plenitude of men on foreign shores, and, after writing on their maps the word 'inadequate,' has returned to those who love the common ground on which he helps them stand; and with him here

> "We now can think, and think aright;
> We now can see with mental sight
> That love strives ever to become
> Of plenitude in man the sum."

Hail to the CHIEF OF THE CHUTMUCKS! Long may he wave!

THE *Buffalo Express*, of Saturday, September 21st, publishes an account of a collision between the Emergency ambulance and a heavily laden dray wagon, at North Division and Oak streets, in

this city. While we do not assume to decide as to who was technically at fault in this deplorable accident, in which both the surgeon and driver of the ambulance were seriously injured, we yet insist that it is strongly in evidence that the ambulance was being driven at an unnecessary rate of speed. Five minutes' difference in the arrival of an ambulance at a point where its services are required does not materially influence the injured, while the difference in speed necessary to cover this five minutes does greatly jeopardise life and limb.

This accident teaches an important lesson and furnishes another argument for the establishment of the trolley ambulance, the advantages of which were fully set forth in an illustrated editorial, published in the issue of the JOURNAL for August, 1895.

Let the day be hastened when the electric railway ambulance shall take the place of the present dangerous commercial system, until which time let the speed of the horse ambulance be regulated by law.

DR. FORBES WINSLOW, a recognised authority on mental diseases, arrived in this country, August 31, 1895, for the purpose of attending the medico-legal congress. Dr. Winslow is the founder and head of the British hospital for mental diseases and is editor of the *Psychological Journal*. He has devoted much time to the investigation of criminal responsibility. His father was pioneer in bringing about a recognition of the insanity plea as a defense in criminal cases. Previous to 1844 it had never been considered, hence, no matter what the mental condition of a criminal happened to be, if convicted, he was punished; if found guilty of murder, he was executed. In the Macnaughton case, which is well known in English jurisprudence, Dr. Winslow, Sr., was called by the judge to give evidence on the point of the prisoner's alleged insanity. He showed conclusively that Macnaughton was not in his right mind when the crime was committed, and ever since that time the plea of insanity has been recognised in the highest courts.

The visit of Dr. Winslow possesses additional interest from the fact that he has been indefatigable in his efforts to secure the release of Mrs. Maybrick, who has been rendered notorious by her conviction of poisoning her husband and the subsequent agitation started by Dr. Winslow that brought about a commutation of her sentence to life imprisonment. The following, from Dr. Winslow's

own lips in a recent conversation, will state his position in the case:

I have investigated the whole matter thoroughly and everything I have discovered confirms my judgment that Mrs. Maybrick was not responsible for her husband's death. I proved conclusively, for one thing, that the small amount of arsenic found in the dead man's body was accounted for by the arsenical medicine administered by Mr. Maybrick's doctor a few days before death took place. I am personally acquainted with that doctor and the information I obtained from him leaves it a certainty that the amount of arsenic prescribed was sufficient to account for the arsenic found in the body afterward. In fact, everything I have ascertained from personal investigation tends to demonstrate the innocence of Mrs. Maybrick.

"Do you think that the government will eventually be converted to the same belief and give her her freedom?" the doctor was asked. "There is no doubt of it," he replied. "The facts in her favor are being so strengthened that I expect she will be out of jail in six months."

THE "scientific food" theory has had a setback. It has been weighed in the balances of experience and found wanting. A detachment of the United States army was detailed to try it. Fifty men were sent out for a three days' march with "scientific rations in their haversacks. They had little tablets of highly concentrated essences of coffee and bread, which, it was imagined, would be as serviceable as the bulkier drink and food in their usual form. But, at the end of the first day, three-quarters of them were doubled up with cramps. Their digestive organs could not assimilate the concentrated food, or were not satisfied with it, and the experiment was a failure. It is stated that the men were ordered to keep on to the end of the three days' trial, which seems a needless hardship. Their stomachs and intestines are not likely to take to a diet of chemical tablets any more kindly on the second or third day than on the first.

There is something attractive in the notion of scientific food. In many respects it would be a great gain if men could live on a few pills, or powders, or tablets, instead of bulky masses of bread and meat. It would greatly simplify our domestic economy and give each household its longed-for independence from the tyranny of the cook. But it is impossible. A million or so years hence it may be effected, when man has become physically as different from what he is today as he is today from the mollusk, but not before.

The man of today not merely requires a certain amount of absolute nutriment, but he requires it to be commingled with a certain bulk of other matter which is not nutriment at all. He has not only organs of assimilation, but equally elaborate and important organs of excretion, which demand to be supplied with material for their work.

The argument against scientific food—or, more properly, chemically concentrated food—is, therefore, resolved into a parallel to Pope's lines :

> Why has not man a microscopic eye ?
> For this plain reason, man is not a fly.

Man cannot exist upon a chemical diet, for the plain reason that he is a man. He has physical requirements and functions which demand food in other form than chemical extracts. Much may, of course, be done by science to improve our food supply, to render it more wholesome, more efficient, perhaps more convenient and portable. Beyond such limits it can scarcely go. Bread is the "staff of life," and, with meat, and fruit, and vegetables and other adjuncts, is apparently destined to remain so to the end of time.—*New York Tribune.*

At Liberty, N. Y., (*Maryland Med. Jour.*), there will soon be built a new rural retreat for consumptives, for which purpose $20,000 has been contributed by Mr. J. Pierpont Morgan. The location has a high reputation for salubrity and attractiveness. Its easy accessibility to a large population, needing a sanitary retreat less remote from the metropolitan district than are the Adirondacks, will tend to build it up even more rapidly than that on the Saranac.

At the Medico-Legal Congress, held in New York, September 4, 5 and 6, 1895, Dr. William Lee Howard, of Baltimore, read a paper entitled Sexual Perversion and Crime, and while there incidentally gave some reasons and facts that called for the regulation of hypnotism by legal action. In the *New York Tribune*, September 15, 1895, Mr. Joseph H. Fussell challenges Dr. Howard's methods of psychological investigations. It appears that Dr. Howard, by means of a hypnotic suggestion, caused an honest man to commit theft and that afterward, when the stolen property was found upon the man, he fell into a cataleptic condition. Dr.

Howard adds that the man's brain was, he believed, permanently injured.

Dr. Howard replies to Mr. Fussell in the *Tribune*, September 20th, in course of which he writes as follows :

I have strongly advocated the legal suppression of the traveling and ignorant mesmeriser. The trail of hysteria that is left among the young women in the towns visited by these persons can only be understood by one who has followed the course of these crude exhibitors. All public demonstrations of hypnotism should be suppressed by legal action, and the courts should take cognisance of citizens being subjugated by any unqualified experimenter, as it does of the unlawful practice of drug prescribing or surgical operations by unqualified and unlegalised persons. It was to enable me to take a decided stand in this matter that I have experimented so far with the various phases of hypnotism. I am satisfied with my facts. It has been done with that scientific zeal and desire for truth that accompany all investigations. If Mr. Fussell thinks that I should have ceased at the point of finding out whether crime could be committed by hypnotic suggestion or not, I beg to differ from him. By doing as I have I hoped to prevent further crime from being committed through this agency, as well as to put a stop to those numerous and silly pleas that are now brought forward in our courts of hypnotic influence. I believe that only a small percentage of subjects can be made to commit crime, but we must take cognisance of that small number.

For a full explanation of this subject I refer Mr. Fussell to my article in the *New York Medical Journal*, March 9, 1895. Others in numerous daily journals throughout the country, as well as Mr. Fussell in the *Tribune*, ask about the legal responsibility of the hypnotiser and the hypnotised. With your kind permission I will answer all through the *Tribune*.

In discussing the question from the point of view of criminal law, we are confronted by two great questions : first, the responsibility of the hypnotiser and, second, the responsibility of the hypnotised. To the first question the answer is simple. The hypnotiser occupies a position akin to that of an accessory before the fact who, under the common law of England, is equally guilty with, and is punished as, a principal ; but in the case of a crime committed by one under hypnotic suggestion, the guilt of the hypnotiser is increased. In the case of principal and accessory there are two wills acting in unison, but in the other the will of the hypnotiser stands alone in the guilt, and if the crime was murder his position is precisely that of one who lets loose a wild animal upon his victim, knowing that the nature of the animal is such that he will surely kill.

From what I have said on the first question it follows as a corollary to

the proposition that the second question is answered, by saying that the responsibility of the hypnotised is no greater than that of one who is *non compos mentis;* but this broad generalization requires to be somewhat qualified, and in this connection I desire to note my dissent from Albert Moll, in his sweeping condemnation of the view of Desjardins, "that a person who commits a crime by post-hypnotic suggestion is punishable, because he might have foreseen the possibility of such suggestion."

This language is, from a legal point of view, objectionable, in that it is vague and liable to misconstruction; but with certain qualifications it can, I think, be fairly indorsed. If the party hypnotised knew previously that the hypnotiser had this power and was a man of criminal habits and inclinations, and that he himself was subject to hypnotic influence, and yet, while in full possession of his will, he placed himself in such a position as to be within the scope of hypnotic influence, I am strongly of the opinion that a certain degree of legal responsibility attaches to him for any crime he may commit, either under the influence of hypnotic or post-hypnotic suggestion, though to what extent he should be punished I am not prepared to say; but his position might fairly be held to be somewhat analogous to that of an engineer by whose carelessness a passenger was killed—the absence of criminal intent being the same in either case. If, of course, the one hypnotised has caused the criminal act to be suggested to him, the guilt of both parties would be equal.

Now, having fixed the status of the hypnotiser and the hypnotised before the criminal law as to their respective responsibilities, we come to what I regard as the most difficult problem to solve: how is it to be demonstrated that a given crime was committed by a prisoner while in a state of hypnosis? Such claims are now frequently being brought before our courts. Such a defense may rightly be interposed, and while evidence might properly be introduced in a homicidal case to show that the prisoner had no motive to kill the deceased, but that A had such a motive, and that A possessed the hypnotic power, and that the prisoner was subject to hypnotic influence, and while such evidence might raise in the minds of the jury such reasonable doubt that they would be forced to acquit the prisoner; yet, when the picture is reversed and we see A placed at the bar, the prosecution is beset with such difficulties under the rules of evidence, that I do not consider it would be competent for it to prove the responsibility of A by showing that he had exercised the hypnotic power over B at other times, any more than it would be competent for it to prove the guilt of a prisoner by showing that he had been guilty of similar offenses at other times. This evidence is always inadmissible except in rebuttal, where the defense has offered in chief evidence, tending to show the previous good character of the accused. While such evidence would undoubtedly tend to carry moral conviction,

it would, nevertheless, be legally inadmissible. The law deals, particularly in its criminal jurisdiction, with facts, not probabilities, and the evidence must be confined to showing that in committing the crime the one striking the fatal blow was acting under either hypnotic or post-hypnotic suggestion, and that the prisoner was the actual hypnotiser and, *ergo*, responsible.

Another point which occurs to me is the difficulty which might well arise from the trouble in getting the person hypnotised to testify in the presence of the prisoner. Might he not, by the exercise of his power over the witness, prevent him from testifying or render his testimony worthless? Yet it would not be possible to remove the prisoner and then examine the witness, for, by the inexorable rule of common law, every man is entitled to be confronted by the witness against him, and no trial can go on in the absence of the prisoner, so that if the prisoner escapes during the trial of the cause the trial must stop, the common law knowing nothing of any such proceeding as a trial *in contumatio*.

It is evident that some radical changes must be made in our criminal procedure in cases where hypnotism is alleged. I think a point has been reached where scientific investigation, traveling on well-defined and incised lines, has brought out facts that now allow some regulation of hypnotism by a change of laws. The future of the subject should now be confined to those whose training and predilections best fit them to continue research and properly instruct physician and student. Such prerequisites are absolutely necessary to place the phenomena on a dignified platform with nerve physiology. Medical schools should be able to furnish instruction to their students in this rapidly developing branch of medicine, for, as Krafft-Ebing says, "hypnotism, as a biological phenomenon of nature, offers symptoms empirically true, clear and objective, the proof of which is decisive."

We deem this matter of sufficient interest to devote the foregoing space to Dr. Howard and his critic. But we are still strongly of the opinion—a conviction that is constantly increasing in strength—that no person with perfectly healthy brain is susceptible of being hypnotised.

Personal.

Dr. Walter H. Kidder, for some time past assistant physician at the Buffalo state hospital, has been appointed junior assistant physician at the St. Lawrence state hospital, of which Dr. Peter M. Wise, formerly of Erie county, is superintendent. Dr. Kidder is a graduate of Buffalo High School and of the medical department of the

University of Buffalo. He is to be congratulated upon his successful competition before the civil service commission, but his removal from Buffalo is to be regretted.

Dr. Sherwood Dunn, formerly of this city, but for ten years past a resident of Paris, where he has been an assistant of Professor Pozzi, has taken up his residence at Los Angeles, Cal., where he will engage exclusively in the practice of gynecology and abdominal surgery.

Dr. William G. Bissell, of Buffalo, on October 1, 1895, will remove from No. 10 Orton place to the corner of Porter and Normal avenues, where, in his new residence, he has fitted up a private bacteriological laboratory.

At a recent meeting of the trustees of Jefferson Medical College, Philadelphia, the honorary degree of LL. D. was conferred on Dr. John Collins Warren, professor of surgery in Harvard university.

Dr. Frank J. Thornbury, of Buffalo, has removed his office to 405 Delaware avenue, near Edward street, where he will confine his practice to dermatology. Hours, 12–1 and 4–6 P. M.

Dr. Electa B. Whipple, of Buffalo, who has been in Europe for medical study during several months past, will return early in October and resume her professional work.

Dr. F. G. Moehlau, of Buffalo, has removed from 1343 Jefferson street to his new residence, No. 1300 Jefferson street. Hours, 7–9 A. M., 1–3 and 7–8 P. M.

Society Meetings.

Buffalo Academy of Medicine.—*Section of Medicine.*—List of papers and discussions:

September 10, 1895, discussion: Should the present law concerning instruction in the public schools upon the effects of alcohol be repealed? Yes, Dr. H. R. Hopkins. No, Rev. Frank S. Fitch.

October 8th, papers: Gastritis, Dr. A. L. Benedict; Report of an unusual case of purpura, Dr. A. E. Diehl; Tetany, report of five cases, Dr. Wm. C. Krauss, Dr. A. H. Briggs.

November 12th, discussion: Should the Crede method of treatment of the eye in new-born children be carried out in daily practice? Yes, Dr. A. A. Hubbell, Dr. A. G. Bennett. No, Dr. R. L. Banta, Dr. Sidney A. Dunham.

December 10th, Medical Section entertains the Academy.

January 14, 1896, papers: Some of the more important relations of the eye to general practice, Dr. B. H. Grove; Painful urination, Dr. W. H. Heath; Affections of the lingual tonsils, Dr. W. S. Renner.

February 11th, discussion: What are the best methods of medical teaching? Discussion opened by Dr. Henry C. Buswell; A plea for the apprenticeship, Dr. P. W. Van Peyma; For more Hospital Work, Dr. Chas. Cary; For more laboratory work, Dr. Roswell Park.

March 10th, papers: Dilatation of the stomach, Dr. Allen A. Jones; Forcible respiration and pneumatic cabinet, Dr. J. H. Pryor; On the value of forced respiration in saving human life in chloroform, ether and nitrous oxide narcosis, Dr. George E. Fell.

April 14th, discussion: Is creosote of advantage in tuberculosis? Yes, Dr. DeLancey Rochester. No, Dr. J. H. Pryor.

May 12th, papers: Membranous enteritis, Dr. Lillian C. Randall; Cystitis, Dr. W. D. Greene; Intestinal stone, with specimen, Dr. W. C. Phelps.

June 9th, discussion: Have medical men a moral right to patent medical instruments? Yes, Dr. George E. Fell. No, Dr. Herman E. Hayd.

Meetings will commence promptly at 8.45 P. M. Papers should not exceed fifteen minutes, nor all the discussions on a paper ten minutes. Preference given to those who bring patients for demonstration.

DR. LUCIEN HOWE, *President.*

DR. IRVING W. POTTER, *Secretary.*

Advisory committee, Dr. Charles G. Stockton, Dr. Henry C. Buswell, Dr. H. R. Hopkins.

THE Mississippi Valley Medical Association, at its annual meeting, held in Detroit, September 3–6, 1895, elected the following officers: President, Dr. H. O. Walker, of Detroit; vice-presidents, Dr. B. Merill Rickets, of Cincinnati, and Dr. Frederick C. Woodburn, of

Indianapolis; secretary, Dr. H. W. Loeb, of St. Louis; treasurer, Dr. Harold N. Moyer, of Chicago. The next annual meeting will be held in St. Paul, Minn.

THE Tri-State Medical Society, of Alabama, Georgia and Tennessee, will hold its next annual meeting at Chattanooga, Tuesday, Wednesday and Thursday, October 8, 9 and 10, 1895. Dr. Frank Trester Smith, the secretary, has issued a preliminary program, which bespeaks an interesting meeting.

THE MEDICAL Association of Central New York will hold its twenty-eighth annual meeting in Syracuse, Tuesday, October 15, 1895, under the presidency of Dr. Floyd S. Crego, of Buffalo. Dr. E. B. Angell, of Rochester, the secretary, is preparing a program for the occasion.

THE American Public Health Association holds its twenty-third annual meeting at Denver, Tuesday, Wednesday, Thursday and Friday, October 1, 2, 3 and 4, 1895, under the presidency of Dr. William Bailey, of Louisville. Dr. Irving A. Watson, of Concord, N. H., is the secretary.

Book Reviews.

A SYSTEM OF SURGERY. By American authors. Edited by FREDERIC S. DENNIS, M. D., Professor of the Principles and Practice of Surgery, Bellevue Hospital Medical College, New York; President of the American Surgical Association, etc., assisted by JOHN S. BILLINGS, M. D., LL. D., D. C. L., Deputy Surgeon-General, U. S. A. To be completed in four imperial octavo volumes, containing about 900 pages, each with index. Volume II., 915 pages, 515 engravings and ten colored plates. Price, per volume, $6.00 in cloth; $7.00 in leather; $8.50 in half morocco, gilt back and top. Philadelphia: Lea Brothers & Co. 1895.

This volume opens with a section on minor surgery, consisting of 136 pages, written by Henry R. Wharton. It gives minute details for bandaging, with copious illustrations, most of which are the author's own, from photographs of applied bandages. The fifty-six pages devoted to this part of the subject approach nearly to a clinic. Then follows instructions for the application of fixed dressings, such as plaster-of-Paris to fractures and to spinal curvatures. A short account of materials used in surgical dressings is given, among which are instructions for strapping organs in differ-

ent parts of the body, irrigation, use of moxa, introduction of setons, cautery, scarification, transfusion, employment of artificial respiration, aspiration, use of the stomach pump, hypodermic injections and the rectal tube. Electro-therapy is touched upon, instructions given for the employment of the cystoscope and similar instruments, and the introduction of catheters and bougies. Wharton is very unsatisfactory in his directions about washing out the bladder. He omits mention of the method employed by Daggett, of Buffalo, which is, by far, the best yet devised, and is a distinct addition to the therapy of cystic disease. Surgical needles, sutures and ligatures are well described; so, too, is acupressure. This is practically a republication of the author's treatise on minor surgery which is already in the hands of the profession, but to which some additions have been made.

Plastic surgery forms the subject of the next section, which is written by George R. Fowler, and covers fifty pages of the book. Hare-lip and cleft-palate command considerable attention, with copious illustrations. So, too, with regard to rhinoplasty. Bone-grafting might well receive more detailed treatment; but, on the whole, this section on plastic surgery is very satisfactory.

The third section is devoted to a consideration of military surgery and the care of the wounded on the battlefield, and is written by Lieutenant-Colonel W. H. Forwood, U. S. army. The author gives an account of the immediate care of wounded and their transportation. He writes an interesting article on the medical officer and his work, and relates a great truth in the following words: "After every great battle, all the more severely wounded ought to remain and be taken care of near as possible to where their wounds were received."

A section on diseases of the bones next follows, from the pen of Nicholas Senn. This is a most important subject, one to which insufficient attention is paid, but of which this author is a master. Into the forty-six pages here presented he has condensed information of great value.

Orthopedic surgery is next presented, by Virgil P. Gibney, than whom no one is more competent to speak authoritatively on this subject. When a man cures a deformed human being, or so modifies his crippled condition as to make him self-supporting, he has performed a most important service to the community. There is no department of surgery that bears so close a relation to political economy as this. Gibney is very strong in his management of hip-disease. The whole section is intensely interesting and well illustrated.

Next follows a section devoted to aneurism, written by Lewis A. Stimson, which is, by far, the amplest and best setting forth of the subject we have seen. Its pathology is clear and its treatment is intelligent. Surgery of the artery and veins is given by Frederic S. Dennis, and surgery of the lymphatic system by Frederic Henry Gerrish.

The most voluminous section in the book, consisting of 285 pages, is devoted to the consideration of diseases and injuries of the head, and is written by Roswell Park. Brain surgery has attracted great attention of late, and advances in this department have been most marked. Cerebral localisation has contributed to aid the surgeon, who, in turn, has relieved many diseases heretofore thought to be incurable, not to say inoperable. Intra-cranial tumors are now diagnosticated and successfully excised that formerly were allowed to progress to fatal issue. This is one of the most satisfactory dissertations on the subject of head injuries and diseases that has yet appeared, and it is well worth the careful study of every surgeon as well as neurologist. The author ought to be induced to put it forth as a separate treatise.

Closely allied to the foregoing is the surgery of the spine, hence it is fit that it should follow it in close order. This section is written by W. W. Keen, and is both comprehensive and scholarly. It has, too, surrounding it the atmosphere of the practical surgeon, which lends interest to its instructive pages.

Finally, we find surgery of the nerves described by John B. Roberts in an admirable essay of fifty pages.

This volume is full of interest from cover to cover, and a detailed examination of it fully justifies the opinion we have previously expressed of the work.

A Treatise on the Nervous Diseases of Children, for Physicians and Students. By B. Sachs, M. D., Professor of Mental and Nervous Diseases in the New York Polyclinic; Consulting Neurologist to the Mt. Sinai Hospital; Neurologist to the Montefiore Home for Chronic Invalids; ex-President of the American Neurological Association. One volume, pp. 688, 8vo, illustrated by 169 engravings in black and color and a colored plate. Muslin, $5.00. New York: William Wood & Company. 1895.

Perhaps no one is more better fitted to write a treatise on the nervous diseases of children than Professor Sachs, and the manner in which he has accomplished the task is proof of his ability in this direction. Just why the title of the book should be restricted to the nervous disturbances of childhood, when, in fact, the large majority of nervous diseases affect both young and old alike is questionable, and it seems to narrow the field of its distribution and consequently accessibility.

We cannot quite agree that its limitation to the diseases of children is a peculiarly happy one, inasmuch as it is not monographic enough for special workers and yet too full and complete for the average busy practitioner or time-pressed medical student. It does serve, however, to place the author's views and beliefs on record and adds another volume to the excellent list of American neurologies. The reviewer believes that every original worker or thinker should leave some record or archive in which his views can

be easily consulted and is extremely glad that Professor Sachs has in this volume found expression for his wide experience, judicious selection of facts and personal investigations. The stamp of a master-mind is imprinted on every page and the book, consequently, bristles with knowledge of the greatest worth to workers in the field of neurology.

Instead of beginning with the organic diseases, the author starts out with a description of the functional diseases, convulsions, epilepsy, hysteria, chorea and the like. The surgical treatment of the eye muscles for the cure of epilepsy is utterly condemned and the operation of trepanation is not urged with as much fervor as was done a few years ago. As regards hysteria, the author states that it is a relatively rare disease in the adult and still rarer in the child; and this has been the experience of the reviewer, although to the general practitioner it seems to be an ever-present malady. He further states that the Anglo-Saxon race is less prone to the development of hysteria than the other races represented in our population. These chapters are well presented, the facts well brought out and clearly elucidated.

Somewhat disappointing is the short article on enuresis nocturna, many forms of which are of nervous origin and not due to indifference, laziness or wilfulness. This annoying condition is extremely often met with by the general practitioner and specialist in neurology and should receive, somewhere, a very careful analysis and investigation, and where better than in a treatise on the nervous diseases of children?

On the organic diseases of the cord and brain, muscular atrophies and the like, the author is at his best and a large experience enables him to present these chapters in a masterful manner. The cerebral and spinal palsies of children and different types of muscular atrophy have attracted the author's attention for some years past, and their succinct portrayal at this place is eagerly welcomed by all readers of neurological literature. The closing chapters are devoted to the consideration of mental disturbances of childhood, hardly enough attention being given to idiocy, imbecility and cretinism, affections of childhood par excellence. In regard to partial or defective development of the brain, the author does not believe that Lannelongue's operation is likely to permanently increase the intra-cranial capacity, nor does he consider that a small skull is the primary or even the most important cause of arrested development of the brain. The fault lies chiefly with the brain itself and cannot be remedied by operation. One hundred and sixty-two nicely executed illustrations adorn the work, the majority of which are original and here published for the first time, giving the book a sparkle and brilliancy in keeping with its reading matter. It will, no doubt, take front rank with the very best text-books on neurology in any language.

The publishers have succeeded admirably in doing what was expected from the William Wood Company. W. C. K.

THE DEFORMITIES OF THE HUMAN FOOT. WITH THEIR TREATMENT. By W. J. WALSHAM, M. B., C. M., Aberd.; F. R. C. S., Eng.; Senior Assistant Surgeon, Surgeon in Charge of the Orthopedic Department and Lecturer in Anatomy, St. Bartholomew's Hospital, etc., and William Kent Hughes, M. B., Lond.; M. B., Melb.; M. R. C. S., Eng.; L. R. C. P., Lond.; Orthopedic Surgeon, St. Vincent's Hospital; Assistant Surgeon, Children's Hospital, Melbourne; Surgical Tutor, Trinity College, Melbourne, etc. Extra muslin; 8vo, pp. 550. Price, $4.50. New York: William Wood & Company. 1895.

The most interesting branch of orthopedic surgery is that relating to deformities of the feet, and in no department of surgery has there been more improvement within the last twenty-five years than in this. During the plastic period of infancy and childhood, deformities can be corrected by the knife or other mechanical means, that otherwise would cripple the individual for life. To cure the deformed and make the dependent self-supporting is among the highest functions of the surgeon.

The authors of this work are distinguished for their skill and have recorded in it their experience during thirteen years' service in the orthopedic department of St. Bartholomew's hospital. It will readily be seen that such a work must be of the most practical character, written, as it is, by practical men and based on their own clinical experience, and it will be easily taken as authority on the subject. The book is beautifully printed, profusely and excellently illustrated. It should find its place on the book shelves of the practiser of general medicine.

THE CARE OF THE BABY. A Manual for Mothers and Nurses, containing practical directions for the management of infancy and childhood in health and disease. By J. P. CROZER GRIFFITH, M. D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania; Professor of Clinical Medicine in the Philadelphia Polyclinic and School for Graduates in Medicine; Physician to the Children's Hospital, etc. Small 8vo. pp. 392. Price, $1.50. Philadelphia: W. B. Saunders, 925 Walnut street. 1895.

This book is by an experienced author and he has told many valuable things in it that ought to be known by mothers and nurses as well as those about to become mothers. In it he discourses on the hygiene of pregnancy, the characteristics of a healthy baby, the growth of its mind and body, the methods of bathing, dressing and feeding children of different ages, the hours for sleeping, physical and mental exercise and training and the proper qualities of children's nurses and rooms.

Nearly one-half of the book is devoted to the consideration of the sick baby, while an appendix is added in which dietary and remedies are formulated. The whole is written in a simple and pleasant manner, without marked technicalities, but yet with scientific accuracy.

This is one of the books that will do good in the hands of mothers and nurses, for whom it is specially intended.

REMOTE CONSEQUENCES OF INJURIES OF THE NERVES AND THEIR TREATMENT. An examination of the present condition of wounds received in 1863–65, with additional illustrative cases. By JOHN K. MITCHELL, M. D., Assistant Physician to the Orthopedic Hospital and Infirmary for Nervous Diseases, Philadelphia; Lecturer on Physical Diagnosis in the University of Pennsylvania. Duodecimo, pp. 233, with twelve illustrations. Cloth, $1.75. Philadelphia: Lea Brothers & Co. 1895.

This author has been delving in a new field, or, perhaps, more properly, has been cultivating an old field in a new manner. The importance of a more thorough understanding of nerve injuries by surgeons and neurologists can scarcely be overestimated. The records of the surgeon-general's office at Washington are rich with important examples of gun-shot injuries to nerves. Dr. Mitchell has taken great pains to trace a large number of these to their remote results and has recorded the information obtained in this book. The difficulties incurred in this research have been many, owing to changes of address, fear of losing their pension and other causes, known and unknown, that have entered into the search for many old soldiers whose cases possessed interest. The pension office lent valuable aid, without which, in many instances, it would have been impossible to succeed.

We commend the study of this book to all interested in the subject.

FORMULAIRE DES SPECIALITES PHARMACEUTIQUES, composition, indications thérapeutiques, mode d'emploi et dosage, á l'usage des mèdecins, par le D. M. GAUTIER, ancien interne des hôpitaux, et F. RENAULT, pharmacien de 1re classe, lauréat de l'École de pharmacie. 1 vol. in-18 de 300 pages, cartonné 3 fr. Librairie J.-B. Baillière et Fils, 19 rue Hautefeuille (près du boulevard Saint-Germain), á Paris. 1895.

This is a very conveniently arranged little book and will be found useful in refreshing the memory concerning the composition and uses of special pharmaceutical preparations. It furnishes the latest information concerning the use of most such and is preceded by a commentary of Professor Cornil on his personal experience with these preparations.

A GUIDE TO THE ANTISEPTIC TREATMENT OF WOUNDS. By Dr. C. SCHIMMELBUSCH, Assistant in the Royal Surgical Clinic of the University of Berlin. Preface by Prof. E. Von Bergmann. Translated from the second revised German edition, with express permission of the author, by Frank J. Thornbury, M. D., Lecturer on Bacteriology, University of Buffalo, N. Y., etc. Octavo, pp. xii.—233, with forty-three illustrations. New York: G. P. Putnam's Sons, 27 West Twenty-third street. 1895.

This book contains an excellent setting forth of the principles that should govern the aseptic treatment of wounds. It should be

the aim to treat all wounds aseptically, and students and physicians need the most thorough training in regard to personal cleanliness as well as in the careful and clean manipulation of wounds and dressings.

The author teaches these principles in the most systematic and simple manner, and the translator has performed his part with ability such as to receive the encomiums of the author.

The book is well illustrated and handsomely printed.

TRANSACTIONS OF THE MEDICAL ASSOCIATION OF CENTRAL NEW YORK. Twenty-seventh Annual Meeting, Buffalo, N. Y., October 16, 1894. BUFFALO MEDICAL JOURNAL Print. 1895.

This brochure of eighty-four pages contains the proceedings of, and papers read before this, association at its last annual meeting. These papers have appeared in the JOURNAL, so that most of our readers are familiar with them.

It is an excellent plan for every medical society to print and preserve its work in an accessible form for reference. If this association had done so at the outset, its members could now enjoy a valuable collection of medical literature. When a society fails to preserve its work, it does itself injustice, and it is to be hoped that this excellent association will continue the method so auspiciously begun.

SEVENTEENTH ANNUAL REPORT OF THE STATE BOARD OF HEALTH OF ILLINOIS. Being for the year ended December 31, 1894. With an appendix containing the official register of physicians and midwives, 1895. Springfield: Ed. F. Hartman, State Printer. 1895.

A large part of this volume is given up to the publication of the official register of physicians in the state of Illinois. The reduction in the appropriation for publication has rendered it necessary to condense much of this material and to omit sundry data that heretofore have been published. The good work of this board, inaugurated by the late Dr. John H. Rauch, in improving the standard of medical education, has been the subject of favorable comment all over the land.

THE AMERICAN ACADEMY OF RAILWAY SURGEONS. Official report of first meeting held at Chicago, Ill., November 9-10, 1895. Edited by R. Harvey Reed, M. D., Columbus, O. Chicago: American Medical Association Press. 1895.

This little volume contains the proceedings and papers read, together with discussions thereon, at the first meeting of this new organization. It will prove of interest not only to its members but many others engaged in the practice of railway surgery.

THE POCKET MATERIA MEDICA AND THERAPEUTICS. A Résumé of the Action and Doses of all Officinal and Non-officinal Drugs now in Common Use. By C. HENRI LEONARD, A. M., M. D., Professor of the Medical and Surgical Diseases of Women and Clinical Gynecology in the Detroit College of Medicine, etc. Second edition, revised and enlarged. Cloth, large 16mo, 367 pages. Price, postpaid, $1.00. Detroit: The Illustrated Medical Journal Co., Publishers. 1895.

In this second edition of Leonard's popular work sixty-seven pages have been added, a new and complete cross-index has been prepared, typographical errors corrected and in other ways it has been greatly improved and brought forward to the present period.

The descriptive arrangement of the drugs is as follows: Alphabetically the drug, with its pronunciation, (officinal or non-officinal standing indicated,) genitive case-ending, common name, dose and metric dose. Then the English, French and German synonyms. If a plant, the part used, habitat, natural order, botanic description, with alkaloids, if any; if a mineral, its chemical symbol, atomic weight, looks, taste, how found, its peculiarities. Then the action and uses of the drug or compound, its antagonists, its incompatibles, its synergists and then antidotes. Then follow its officinal and non-officinal preparations with their medium and maximum doses. Altogether it is a handy volume for physician, druggist or student, and will be frequently appealed to if in one's possession.

EXERCISE AND FOOD FOR PULMONARY INVALIDS. By CHARLES DENISON, A. M., M. D., Denver, Col., Professor of Diseases of the Chest and of Climatology, University of Denver, etc. Price, 35 cents. Denver: The Chain & Hardy Company. 1895.

This monograph is written by an author who has experience on the subject and it will be found to contain many points of interest to those afflicted with pulmonary disease. One of its special purposes, however, seems to be to advertise the instruments that have been devised by the author.

BOOKS RECEIVED.

Physical and Natural Therapeutics. The Remedial Use of Heat, Electricity, Modifications of Atmospheric Pressure, Climates and Mineral Waters. By Georges Hayem, M. D., Professor of Clinical Medicine in the Faculty of Medicine of Paris. Edited with the assent of the author, by Hobart Amory Hare, M. D., Professor of Therapeutics in the Jefferson Medical College of Philadelphia. In one handsome octavo volume of 414 pages, with 113 engravings. Cloth, $3.00. Philadelphia; Lea Brothers & Co., Publishers. 1895.

Pathology and Morbid Anatomy. By T. Henry Green, M. D., Lecturer on Pathology and Morbid Anatomy at Charing-Cross Hospital Medical School, London. Seventh American from the eighth and revised English edition. Octavo volume of 595 pages, with 224 engrav-

ings and a colored plate. Cloth, $2.75. Philadelphia: Lea Brothers & Co., Publishers. 1895.

Disorders of the Sexual Organs in the Male. By Eugene Fuller, M. D., Instructor in Venereal and Genito-Urinary Diseases, New York Post-Graduate Medical School. In one very handsome octavo volume of 238 pages, with twenty-five engravings and eight full-page plates. Cloth, $2.00. Philadelphia: Lea Brothers & Co., Publishers. 1895.

The Urine in Health and Disease and Urinary Analysis, Physiologically and Pathologically Considered. By D. Campbell Black, M. D., L. R. C. S., Professor of Physiology, Anderson College Medical School. In one 12mo volume of 256 pages, with seventy-three engravings. Cloth, $2.75. Philadelphia: Lea Brothers & Co., Publishers. 1895.

A Text-Book of Practical Therapeutics, with Especial Reference to the Application of Remedial Measures to Disease and their Employment upon a Rational Basis. By Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. With special chapters by Drs. G. E. de Schweinitz, Edward Martin and Barton C. Hirst. New (fifth) edition, thoroughly revised. In one octavo volume of 740 pages. Cloth, $3.75; leather, $4.75. Philadelphia: Lea Brothers & Co., Publishers. 1895.

A System of Surgery. In a series of Contributions by twenty-five English Authors. Edited by Frederick Treves, F. R. C. S., Surgeon to, and Lecturer on, Surgery at the London Hospital, Examiner in Surgery at the University of Cambridge. In two large and handsome octavo volumes. Volume I., 1178 pages, 463 engravings and two colored plates. Cloth, $8.00. Volume II., preparing. Philadelphia: Lea Brothers & Co., Publishers. 1895.

A Manual of Organic Materia Medica; Being a Guide to Materia Medica of the Vegetable and Animal Kingdoms. For the use of Students, Druggists, Pharmacists and Physicians. By John M. Maisch, Ph. D., Professor of Materia Medica and Botany in the Philadelphia College of Pharmacy. New (sixth) edition, thoroughly revised, by H. C. C. Maisch, Ph. G. In one very handsome 12mo volume of 509 pages, with 285 engravings. Cloth, $3.00. Philadelphia: Lea Brothers & Co., Publishers. 1895.

A Manual of Obstetrics. By A. F. A. King, M. D., Professor of Obstetrics and Diseases of Women in the Medical Department of the Columbian University, Washington, D. C., and in the University of Vermont, etc. New (sixth) edition. In one 12mo volume of 532 pages, with 221 illustrations. Cloth, $2.50. Philadelphia: Lea Brothers & Co., Publishers. 1895.

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Lectures on Appendicitis and Notes on other Subjects. By Robert T. Morris, A. M., M. D., Fellow of the New York Academy of Medicine, American Association of Obstetricians and Gynecologists, etc., etc.

Octavo, pp. xviii.—163. With illustrations by Henry Macdonald, M. D. New York: G. P. Putnam's Sons, 27 West Twenty-third street. 1895.

Clinical Lectures on Diseases of the Nervous System. Delivered at the National Hospital for the Paralysed and Epileptic, London. By W. R. Gowers, M. D., F. R. S., Physician to the Hospital; Consulting Physician to University College Hospital, etc. Octavo, pp. 279. Price, $2.00. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1895.

Some Physiological Factors of the Neuroses of Childhood. By B. K. Rachford, M. D., Professor of Physiology and Clinician to Children's Clinic, Medical College of Ohio, etc., etc. Duodecimo, pp. viii. —122. Price, $1.00. Cincinnati: The Robert Clarke Company. 1895.

Eyesight and School Life. By Simeon Snell, F. R. C. S., Ed., Ophthalmic Surgeon to the Sheffield General Infirmary and to the School for the Blind; Lecturer on Diseases of the Eye at the Sheffield Medical School; Consulting Ophthalmic Surgeon to the Rotherham Hospital. Duodecimo, pp. 77. With numerous illustrations. Price, 63 cents. Bristol: John Wright & Co. 1895.

A Text-Book on Nervous Diseases. By American Authors. Edited by F. X. Dercum, M. D., Clinical Professor of Diseases of the Nervous System in the Jefferson Medical College, Philadelphia. In one handsome octavo volume of 1052 pages, with 341 engravings and seven colored plates. Cloth, $6.00; leather, $7.00. Philadelphia: Lea Brothers & Co., Publishers. 1895.

Miscellany.

AN ARMY medical board will be in session at Washington City, D. C., during October, 1895, for the examination of candidates for appointment to the medical corps of the United States army, to fill existing vacancies. Persons desiring to present themselves for examination by the board will make application to the secretary of war, before October 8th, for the necessary invitation, giving the date and place of birth, the place and state of permanent residence, the fact of American citizenship, the name of the medical college from which they were graduated, and a record of service in hospital, if any, from the authorities thereof. The application should be accompanied by certificates based on personal acquaintance, from at least two reputable persons, as to his citizenship, character and habits. The candidate must be between twenty-two and twenty-nine years of age and a graduate from a regular medical college, as evidence of which his diploma must be submitted to the board. Further information regarding the examinations may be obtained by addressing Surgeon-General U. S. Army, Washington, D. C.

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Original Communications.

THE LAW COMPELLING THE TEACHING OF PHYSIOLOGY AND HYGIENE IN THE PUBLIC SCHOOLS.[1]

WITH PARTICULAR REFERENCE TO ALCOHOLICS AND NARCOTICS.

BY H. R. HOPKINS, M. D.,
Professor of hygiene in the University of Buffalo.

YOU will excuse a single observation on the reason why the officers of the Academy thought it wise to put upon its program this evening's discussion. We do not need to go far to find the reason, and it may not be out of place to take a moment of the few allotted to me, to state why this and similar discussions may well engage the time and the best efforts of our members.

The work of the medical profession is honorable at all times, and when well done is always an important factor in the well-being of the community. The highest honor and the weightiest responsibility of our profession is when questions of public health or public morals are up for general discussion, and the time comes for hearing what the doctors from their particular knowledge and experience have to say. There can be no more important topic to any people than that of a right knowledge of physiology and hygiene, and there is no more potent factor at work in the production of suffering and disease than the abuse of alcoholics and narcotics.

This question is now before the people of this state in the shape of a law passed by the last legislature, compelling the teaching of physiology and hygiene, with particular reference to the action of alcoholics and narcotics. It is a question upon which the medical profession has singular knowledge and experience, it is a question which the state may not intelligently settle until the medical profession has spoken, it is a question of great inherent

1. Discussion before the Buffalo Academy of Medicine, September 10, 1895.

difficulty and complexity—touching with its two hands the heart of our educational system, and the most sensitive and important nerves of the body politic,—it is a question in which great popular ignorance and greater popular prejudice make a wrong conclusion particularly easy, and it is a question demanding careful and many-sided study and a right conclusion by every interest of public health and public morality; therefore we may safely conclude that the Academy may profitably discuss this question at this time.

In the year 1884, our legislature enacted a law containing the following provision :

> Provision shall be made by the proper local school authorities for instructing all pupils in all schools supported by public money, or under state control, in physiology and hygiene.

If the promoters of this measure had stopped at that point they would have been judged not only earnest and sincere in this agitation, but what is more important, wise in their methods; but they go on and add the words, "with special reference to the effects of alcoholic drinks, stimulants and narcotics upon the human system."

This law is in operation for ten years and apparently does not produce the desired and expected results and in the present year the same people succeed in passing important amendments. The law of 1895 may be said to contain the fully developed thought of the agitators of this matter—a party that call themselves the scientific temperance party—and with the passage of the law of 1895 the matter for the first time attracted general public notice. The law is short and I give it entire ;

LAW OF 1895.—CHAPTER 1041.

AN ACT

To amend the consolidated school law providing for the study of the nature and effects of alcoholic drinks and other narcotics, in connection with physiology and hygiene in the public schools, approved June 15th.

The People of the State of New York, represented in Senate and Assembly, do enact as follows :

SECTION 1. Sections nineteen and twenty of article fifteen of the consolidated school law are amended to read as follows :

§ 19. The nature of alcoholic drinks and other narcotics and their effects on the human system shall be taught in connection with the various divisions of physiology and hygiene as thoroughly as are other branches for not less than four lessons a week for ten or more weeks in

each year in all grades below the second year of the high school in all schools under state control, or supported wholly or in part by public money, and also in all schools connected with reformatory institutions. All pupils must continue such study till they have passed satisfactorily the required primary, intermediate or high school test in the same, according to their respective grades. All regents' examinations in physiology and hygiene shall include a due proportion of questions on the nature of alcoholic drinks, tobacco and other narcotics, and their effects on the human system. The local school authorities shall provide facilities and definite time and place for this branch of the regular course of study. All pupils who can read shall study this subject from suitable text-books, but pupils unable to read shall be instructed in it orally by teachers using text-books adapted for such instruction as a guide and standard, and these text-books shall be graded to the capacities of primary, intermediate and high school pupils. For students below high school grade they shall give at least one-fifth their space, and for students of high school grade shall give not less than twenty pages to the nature and effects of alcoholic drinks and other narcotics, but pages on this subject in a separate chapter at the end of the book shall not be counted in meeting the minimum. No text-book on physiology not conforming to this act shall be used in the public schools except so long as may be necessary to fulfill the conditions of any contract existing on the passage of this act.

§ 20. In all normal schools, teachers' training classes and teachers' institutes, adequate time and attention shall be given to instruction in the best methods of teaching this branch, and no teacher shall be licensed who has not passed a satisfactory examination in the subject, and the best methods of teaching it. No state school money shall be paid for the benefit of any district, city, normal or other school herein mentioned, until the officer or board having jurisdiction and supervision of such school has filed with the officer whose duty it is in each case to disburse the state school money for such school an affidavit made by such officer, or by the president or secretary of such board, that he has made thorough investigation as to the facts and that to the best of his knowledge, information and belief all the provisions of this act have been faithfully complied with during the preceding school year.

§ 2. This act shall take effect August 1, 1895.

You will observe that the thought and purpose of the promoters of the so-called scientific temperance have unfolded not a little between the years 1884 and 1895. What that purpose really is we may judge by looking at these two laws and at the text-book and teaching these laws would compel. At the first we were to be taught the effects of alcoholic drinks, stimulants and narcotics, but later the demand is that in addition to this, we shall be taught the

"nature of alcoholic drinks and other narcotics." If this means anything, it means that we are to be taught chemistry—both inorganic and organic, or at least so much of chemistry as will put the pupil abreast of the knowledge of the various alcohols, alkaloids, ethers and other chemical substances found in "alcoholic drinks and other narcotics." How densely ignorant our promoters of scientific temperance are of their own subject as also of educational matters, we get a hint when we remember that the law of 1895 demands that this teaching be done to children who have not yet learned to read, "but pupils unable to read shall be instructed orally." Before proceeding to state some of the objections to this law, objections which, in my mind, demand its early repeal, let me call to your attention that these alcoholic and narcotic matters are to be taught our children for at least four times per week and for at least ten weeks per year, and this upon penalty of withdrawal of state support from any school failing so to teach.

In presenting the objections which come to my mind, please remember that the speaker is making an extra effort to use such moderate and balanced language as befits the dignity of the occasion and the serious importance of the issue involved. His inclination is almost overwhelming to take refuge in invective and execration. He does not remember ever to have met a more conspicuous example of proper motives and improper and impossible methods than in this campaign of scientific temperance.

My first objection to this law relates to the manner of its passage and is to the effect that it presumes to invade the domain of two distinctly learned professions, our educators and our guardians of public health, and to dictate to both how they shall think and how they shall act and that without conference or consultation with either. The medical profession, as the same is known to the state, is represented by three state organisations, each holding annual meetings at Albany during the session of the legislature which passed this bill, and so far as I have heard this matter was not submitted to either, or to our state board of health. Our educational system is ably represented at Albany by the regents of the university and by the state superintendent of public instruction and by the state teachers' association. The principles of this law strike at the very heart of the teachers' art. Any of these could give our promoters of scientific temperance advice of the greatest value, but such advice was not sought.

Omissions like these are sufficient ground for able-bodied and ugly suspicions as to the structural soundness of this law.

Let us turn aside for a moment and see what light the text-books, advised by our promoters of temperance of the scientific order, throw upon this law or upon their motives and purposes.

On enquiry at our high school I learned that the following was in use in our schools: "Hygienic Physiology, with special reference to the use of alcoholic drinks and narcotics, adapted from the Fourteen Weeks in Human Physiology, by Joel Dorman Steele, Ph. D.; edited and endorsed for the use of schools (in accordance with the recent legislation upon this subject), by the department of scientific temperance instruction, of the Women's Christian Temperance Union, of the United States, under the direction of Mrs. Mary H. Hunt, superintendent." This is a book of over 275 pages, is copiously illustrated with numerous colored full page drawings, and presumes to teach human anatomy and physiology. You will allow me to observe right here that I have always had the conviction that anatomy and physiology are not suitable subjects for teaching in our public schools and that this conviction was deepened by the perusal of the text-book now under consideration. Of this it must suffice to remark that the figures presented by drawings and text do not belong to the human species or to any other family of the animal kingdom.

We will now try and see what our friends of scientific temperance would have our children taught:

Page 128.—ALCOHOLIC DRINKS AND NARCOTICS.—Place on the web of the frog's foot a drop of dilute spirit. The blood-vessels immediately expand, an effect known as "vascular enlargement." Channels before unseen open and the blood-discs fly along at a brisker rate. Next, touch the membrane with a drop of pure spirit. The blood channels quickly contract; the cells slacken their speed and, finally, all motion ceases. The flesh shrivels up and dies. The circulation thus stopped is stopped forever. The part affected will in time slough off. Alcohol has killed it. The influence of alcohol upon the human system is similar. Alcohol is a poison.

Page 133.—Wherever the alcoholised blood goes through the body, it bathes the delicate cells with an irritating, narcotic poison, instead of a bland, nutritious substance.

Page 163.—Is alcohol a food? To answer this question, let us make a comparison. If you receive into your stomach a piece of bread or beef, nature welcomes its presence. The juices of the system at once

take hold of it, dissolve it and transform it for the uses of the body. . . . .

If, on the other hand, you take into your stomach a little alcohol, it receives no such welcome. Nature treats it as a poison and seeks to rid herself of the intruder as soon as possible. The juices of the system will flow from every pore to dilute and weaken it, and to prevent its shriveling up the delicate membranes with which it comes in contact. The veins will take it up and bear it rapidly through the system. Every organ of elimination, all the scavengers of the body—the lungs, the kidneys, the perspiration glands—at once set to work to throw off the enemy. So surely is this the case, that the breath of a person who has drunk only a single glass of the lightest beer will betray the fact. . . . .

Alcohol, then, is not, like bread or beef, taken hold of, broken up by the mysterious process of digestion and used by the body. "It cannot, therefore, be regarded as an aliment" or food.—(Flint). "Beer, wine and spirits," says Leibig, "contain no element capable of entering into the composition of the blood or the muscular fiber." "That alcohol is incapable of forming any part of the body," remarks Cameron, "is admitted by all physiologists. It cannot be converted into brain, nerve, muscle or blood."

I will not detain you with further quotations from this text-book of hygienic physiology, but observe that this matter is to be taught to our innocent and helpless children before they have learned to read and that in the name of science and by the express command of the state. You will also remember that this book and its peculiar teaching is the offspring of the laws demanding the teaching of physiology in our public schools and we will make no mistake when we construe this law and the motives of its promoters in the light of their statements, found in their text book, as to the effects on the human system of alcoholic drinks.

Before trusting ourselves to characterise these statements let us steady our minds with a few of the sober, balanced and judicial utterances of scientific men, made in the interests of public health:

Reference Hand-book of Medical Sciences, page 102. ALCOHOL.—PHYSIOLOGICAL ACTION.—*Stomach and Intestinal Tract.*—The action of this agent upon the stomach and intestinal tract has been one of the bones of contention between the advocates of teetotalism and those who, knowing its virtues, can utilise them. To incorporate the arguments of both sides would be foreign to the scope of this article which is to give the present status of scientific opinion.

Small quantities of alcohol, properly diluted, taken into the stomach, produce an agreeable sensation of warmth which soon diffuses itself over the entire body. It is quickly absorbed. . . . .

Brain and Nervous System.—The primary effect of alcohol (in small quantities) on the nervous system is a stimulation of the functional activity of the brain. This is a result chiefly of a direct stimulation of the alcohol upon the nervous tissue through the increased force of the heart-beat. Its increased frequency and the greater activity of the entire bodily functions undoubtedly assist its local action.

A sense of well-being pervades the body, a greater activity of intellection, increased volubility and a general exhilaration result, which, enduring for a time, are followed by no depression. . . . .

Excretion.—Experimenters all agree in this, that not more than 16 per cent. of the alcohol taken can be found in the excreta. The greater portion disappears in the system. As to its mode of destruction, nothing is positively known. . . . If it is destroyed by oxidation, as we have reason to believe, carbonic acid and water, both normal constituents of the blood, would be the final products and could not be identified as derived from alcohol. . . . .

Administration.—The physical constitution of the patient, together with the state of the health and the result to be acquired, must form the guide to the proper selection and doses. The carefully conducted experiments of Dujardin-Beaumetz, Richardson and others, agree that one gramme (15 grains) of absolute alcohol to every kilo (2 lbs.) of body-weight, is about the daily limit that can be assimilated by the healthy adult without disturbance of digestion or other injurious consequences. It is true, however, that patients exhausted by the continued fevers can absorb amounts far exceeding the normal limits without injury, in fact, with benefit. . . . .

It may be generally stated that the stronger wines are indicated by the weakened conditions occasioned by the long continued fevers, chronic suppurative processes and anemia from frequent hemorrhages and for convalescents generally. . . . .

Brandies, whiskies, etc. (of good quality), are indicated, undiluted, in cases of sudden weakening of the heart's action. Given after a full meal they certainly aid its digestion. This group of alcoholic drinks, when not abused, take the place, with the poor, of the costly condiments of the rich, improving the appetite and aiding digestion. Diluted, they can be used where wines are indicated, but not as efficiently. . . . .

The beers, ales and porters are valuable because of the nutritious material they contain. They are readily assimilated and are pleasant to the taste, and the bitter principles contained in them, together with the alcohol, cause an increased flow of gastric juice. They are, therefore, prescribed with food as a dietary measure. The diastase which exists in the beer is present in sufficient quantity to aid in the conversion of the starchy foods.

Their effect upon the brain is not so pleasant as that of wine due

(according to Rossbach) to the oil of hops, which resembles in physiological action, oil of turpentine. They are desirable for those who cannot stand the cerebral effects of wines.

Parkes Hygiene, page 325.—BEVERAGES AND CONDIMENTS.—*Conclusion as to the Use of Alcohol.*—It does not appear possible at present to condemn alcohol altogether as an article of diet in health; or to prove that it is invariably hurtful as some have attempted to do. . . .

As a matter of public health, it is most important that the medical profession should throw its great influence into the scale of moderation; should explain the limit of the useful power, and show how easily the line is passed which carries us from the region of safety into danger, when alcohol is taken as a common article of food. . . .

Dietetic uses of Alcoholic Beverages.—In wine there are some albuminous substances, much sugar (in some wines) and other carbo-hydrates and abundant salts. Whether it is that the amount of alcohol is small, or whether the alcohol itself be, in some way, different from that prepared from distillation, or whether the coëxistence of carbo-hydrates and of salts modifies its action, certain it is that the moderate use of wine, which is not too rich in alcohol, does not seem to lead to those profound alterations of the molecular constitution of organs, which follow the use of spirits, even when not taken largely. Considering the large amount of vegetable salts which most wines contain, it may reasonably be supposed that they play no unimportant part in giving dietetic value to wine. . . .

In beer there appears to be four ingredients of importance—namely, the extractive matters and sugar, the bitter matters, the free acids and the alcohol. The first, no doubt, are carbo-hydrates and play the same part in the system as starch and sugar, appropriating the oxygen and saving fat and albuminates from destruction. Hence, one cause of the tendency of persons who drink much beer to get fat. The bitter matters are supposed to be stomachic and tonic, though it may be questioned whether we have not gone too far in this direction, as many of the highest-priced beers contain now little else than alcohol and bitter extract. The action of the free acids is not known, but their amount is not inconsiderable, and they are mostly of the kind which form carbonates in the system and which seem to play so useful a part. The salts, especially potassium and magnesium phosphates are in large amount.

It is evident that in beer we have a beverage which can answer several purposes, viz.: can give a supply of carbo-hydrates of acid, of important salts, and of a bitter tonic (if such be needed) independent of its alcohol. . . .

In moderation it is no doubt well adapted to aid digestion and to lessen to some extent the elimination of fat.

Text-Book of Hygiene. Third edition. Rohé. Page 119. *Beverages Containing Alcohol.*—Alcohol is not necessary to persons in good

health. Probably most persons regardless of their state of health, do better without it. Its habitual use in the form of strong liquors is to be unreservedly condemned. The lighter wines and malt liquors, if obtained pure, may be consumed in moderate quantities without ill effects. Even in these forms, however, the use of alcohol should be discouraged or, perhaps, prohibited in the young. . . . .

Beer and its correlatives have considerable dietetic value, owing not merely to the alcohol they contain, but largely to the sugar and acids entering into their composition. When used to excess they often cause a considerable accumulation of fat.

Practical Hygiene. Coplin and Bevan. Page 174. *Food.*—Alcoholic beverages as a food. Yeo, in sympathy with Parkes and others, believes that the minimum amount of alcohol, whether in the form of spirits, wine or beer, which should be taken by a healthy adult, should not exceed one and one-half fluid ounces in the twenty-four hours. In this amount it is believed to be a stimulant to the circulatory, respiratory and nervous system, increasing the appetite and facilitating digestion.

Gentlemen, this is the teaching of the science of medicine upon this subject, and unless we are content to have our text-books the laughing stock of students we will see to it that whatever is taught on the effects of alcoholic drinks upon the human system shall be after this manner.

Regarding the text-book produced by our alleged promoters of scientific temperance, it may be said that there is but slight relation between title and subject matter. Professing to instruct innocent and helpless children upon the effects of alcoholic drinks, it gives a lurid and hysterical dissertation, in language almost vulgar, upon absolute anhydrous alcohol, a substance known only to the chemist and then only as a rare chemical curiosity. As a whole, nothing could be more misleading, misrepresenting and language can scarcely be more immoral.

It is impossible to believe that good can come from such false witness and false teaching, and it needs no very keen insight to foresee that the future public health and morals is seriously menaced by this well-meaning jesuitism. This movement seems to be devised to compel the teaching of the contents of this book to the youths of this state and, regardless of the high motives of its promoters, regardless of who voted for the bill or who signed the law, I do not hesitate to charge that it came from Sheol and is in the handwriting of the father of lies.

But, let us advance from details to principles, and suppose that

the so-called promoters of scientific temperance had come with a bill giving the best thought of the most competent educators of the state upon the fundamental question, Can the physiology and hygienics of alcoholics and narcotics be taught in our public schools with advantage? And if this simple question, without errors or blunders, was put to the medical profession, what have we to say? After relieving the question of every embarrassment which the narrowness, the ignorance, the fanaticism of its friends have put upon it, is there sufficient merit in the case to warrant the state in placing upon its statute books the order compelling this teaching?

To which I make answer, without hesitation or reservation, there is not. And this answer is given in the light of the knowledge, experience and responsibility of many years as family physician, as teacher of hygiene, as one proud to be a citizen of the Empire state, and, more than all beside, as the father of a Christian family. To my mind there are three objections to the root principle of this law, either of which, if valid, is reason sufficient for its repeal.

First.—That the fundamental conception of this law is an offense against science, in that it proposes, in the name of science, to store the mind with facts of a kind the mind is utterly unable to receive, arrange, digest or assimilate and that the result must be either waste of time and effort on the part of child and teacher, or the lodgement in the mind of the child of a brood of half truths, partial truths, distorted truths, certain to stunt the mind, to deform the mold of thought, to produce a pseudo-scientist, the most helpless, hopeless, intractable, incorrigible citizen with which we may burden the state. The pseudo-scientist is the thorn, the thistle, the mildew, the canker worm, the pest of our time; his breed does not need cultivation.

Second.—The thought of this law is an offense against art, in that it violates the principle of form and place and demands that the loathsome facts and secrets of the pathological museum, and the physician's consulting chamber be paraded in our drawing-rooms, class-rooms and nurseries; that innocent minds be made common sewers; that the Kreutzer Sonata and the Heavenly Twins be provided as text-books—recreative and instructive reading for our growing girls and boys. The potential evil of this wholesale poisoning of springs, this widespread destruction of innocence, can neither be overestimated nor overstated.

Third.—This law is an offense against religion in thought and in act, in what it assumes and in what it does. It entrenches upon and violates the domain and province of religion, the right to instruct in morals, and proposes to substitute the dicta of the chemist and the physiologist, in the place of the command from Sinai. But it may be urged against this position, that religion has no place in our public school system and that, therefore, there can be no intrusion, that science is at home in her own house and may do as she likes with her own. To which we may observe that there are questions and more particularly those of morality and religion which town-meetings, state legislatures or general governments do not settle.

All of these may have determined that morality and religion shall not be taught in our public schools and the result will be that morality and religion will be taught in our public schools or our schools will cease to teach anything.

I would commend to the most serious attention of our thinking citizens the most significant fact that some forty of our states have made provision by statute to enforce in different ways that monstrous conception, the teaching of a so-called scientific morality. No state, however, has gone as far as New York.

Again, this law offends religion in that it reverses the value of soul and body and would teach a material morality, having as its object the preservation of the body, to the neglect of the more important duty and responsibility of the care of the soul. The preservation of chastity and temperance in a singular degree is the province of religion. In this work her "Thou shalt not" sounds on from age to age—where religion is direct, positive, authoritative—science is hesitating and indefinite. "Ye shall not surely die" is her usual expression.

In consideration of the foregoing it would seem to be the duty of the medical profession to advise in the interest of science, art and religion that it is inexpedient to urge the teaching in our common schools of physiology regarding the effects of alcoholic drinks and narcotics, but should other counsels prevail and after proper consideration of the matter it should still be determined to teach our children of this matter, then, surely, it is the duty of the profession to demand in the interests of morality and decency that what is taught shall be the simple truth.

433 FRANKLIN STREET.

METHODS OF EMPLOYING ELECTRICITY IN NERVOUS DISEASES.

BY FREDERICK PETERSON, M. D.,

Chief of clinic, department for nervous diseases Vanderbilt clinic, College of Physicians and Surgeons, New York.

IT HAS often seemed to the writer that within the compass of a short paper the guiding principles of electrical treatment in nervous diseases might be succinctly stated for the benefit of the general practitioner, who may be in a quandary often as exactly what particular method to employ in the cases he meets with in his daily practice. In the following abstract of a lecture are given, first, the general methods in use and then in alphabetical order an outline of the electrical treatment in each form of disease in which the neurologist is accustomed to employ this therapeutic agent.

GENERAL CONSIDERATIONS.

For stimulation of nerves and contraction of muscles interruptions are made with the interrupting handle. When this is too stimulating and it is desired to diffuse the current through a part, an ordinary sponge electrode, without an interruptor, may be used just like a sponge, rubbing it up and down on the surface. This is called the *labile method.*

In most applications about the head, eyes, neck, spine, heart or other delicate organs, and in applications for the relief of pain, interruptions of the current are not desirable. The *stabile method* is then used, *i. e.*, the cathode being on some indifferent part, the anode is fixed over the seat of pain or over the spot requiring a sedative. Then the current is gradually turned on and, without interruption of any kind, raised to the strength required and as gradually reduced after a few minutes.

Where it is desired to stimulate nutrition in a part the galvanic current, of course, is used, and it is important and desirable to employ much larger electrodes than we are accustomed to use for this purpose. Thus, if it is wished to improve the nutrition in a leg affected by *poliomyelitis*, electrodes a foot or so in diameter should be applied to the atrophied parts and not the small-sized instruments we are so prone to employ. Better even than the electrodes of large area would be the immersion of the affected extremity in a water-bath, the water being made the anode or cathode as might seem most indicated. If this is adopted more

generally we shall be in the future better rewarded for our efforts in such cases, and proof of the nutritive efficacy of the current will be abundantly presented. The roller electrode is very useful for this purpose.

In many works on electricity much is said about directional methods, the employment of ascending and descending currents upon the spine, for instance. The terms ascending and descending are quite useless. If the physician remembers merely the polar differences of the galvanic current his common sense will teach him where the electrodes are to be placed.

General Faradisation and Galvanisation.—Either of these may be accomplished by placing the electrodes in a wooden bath-tub, divided into two compartments by a rubber diaphragm containing an opening for the trunk of the body, or by having the patient sit upon or place his feet upon a large sponge electrode, or insert his feet into a foot-bath connected with one pole, the other pole being used to sponge the entire body and limbs. This method appeals chiefly to the mind by suggestion and is, therefore, useful in the *neuro-psychoses.* It has also probably some value because of its refreshing effects and with the galvanic current it may be used for the introduction of certain drugs, such as iodide of potassium and corrosive sublimate. As a rule, from five to fifteen minutes' application, three times a week or daily, is the length of time for employment in most neurological conditions.

SPECIAL ELECTRO-THERAPEUTICS IN NEUROLOGY.

Motor Disorders.—We may treat paralysis and spasm by electricity. In paralysis the distinction between the two classes of disorders by the situation of the lesion in the cerebro-spinal, or the spino-muscular segment of the motor tract, is to be remembered. Since in the former the nerves and muscles react to faradaism and suffer no trophic disturbance, the indication for electricity is almost entirely to assist in the prevention of spasmodic contractures. Hence the exercise of the rigid muscles by faradaism is useful. The other form of paralysis, which we may call peripheral, requires faradaism, if the affection is so mild that the muscles still react to this current. Galvanism is also useful in addition because of its nutritive effects upon the partly degenerated nerve and muscle. If, however, the peripheral paralysis is severe, faradaism is of no value, since the muscles cannot be exercised by it, and it has little or no effect upon nutrition. Here galvanism should be used, not

only for its value as a trophic agent, but also to exercise and strengthen the muscles by producing contractions.

Clonic spasm, such as tic convulsif and blepharospasm, may occasionally be improved by the use of the anode (best conjoined with cocaine by cataphoresis) over the affected muscles and nerves, the cathode being placed upon any remote part of the body, like the hand, back or breast.

Tonic spasm, such as torticollis and writer's cramp, may also be relieved to some degree by anodal galvanisation. In any form of spasm usually only the most recent cases are susceptible of mitigation or cure by electricity. In hysterical paralysis or spasms, strong faradisation and static electricity are of great value.

Sensory Disorders.—An irritation or destructive lesion of any part of the sensory tract, from the cortex to the peripheral filaments, produces in the one case hyperesthesia (pain, neuralgia) and in the other anesthesia. Pain and neuralgia require anodal galvanisation and in pains or neuralgias of superficial nerves (trigeminal, intercostal, and the like,) the use of solutions of cocaine of from 10 to 20 per cent. with the anode is indicated. In all such applications for the relief of pain the electrode should be held steadily at one spot (the anode on the painful part, the cathode at any indifferent point,) and the current gradually diminished at the end of from ten to twenty minutes without interruption of any kind. Trigeminal, cervico-occipital, cervico-brachial, intercostal, lumbar, or sciatic neuralgia and rheumatic pains (like lumbago, headache and migraine,) are all to be treated upon this principle.

Anesthesia, on the contrary, is best alleviated by faradisation and the faradaic brush. The anesthetic area should be tapped with the brush with a current strong enough to be painful upon one's own hand. The skin should be dry and if necessary made more so by the use of chalk or powdered starch.

In organic diseases of the brain and spinal cord and in insanity, electricity is of doubtful service. Any value it may possess is probably due to psychic suggestion. But even such powerful suggestive agency is not to be despised. In some functional central diseases, such as neurasthenia, railway brain and railway spine (traumatic neuroses), hypochondriasis, and the like, general or local galvanisation and faradisation are often of considerable service.

CONDENSED LIST OF NERVOUS DISORDERS AND THE MODES OF APPLICATION OF ELECTRICITY WHERE IT IS INDICATED.

Abducens paralysis.—See *oculo-motor palsies*.

Abdominal neuralgia.—Stabile galvanisation from the back to the abdomen.

Amyotrophic lateral sclerosis.—Galvanism to the spine and to the atrophied muscles.

Anesthesias.—The faradaic brush with the current strong enough to redden the skin.

Asphyxia.—The faradaic brush to the epigastrium, neck, face and nostrils, or the interrupted faradaic current to the phrenic nerves.

Aphonia (hysterical).—Faradaism with one pole on each side of the larynx.

Ataxic paraplegia.—Galvanism to the spine; faradaism to exercise rigid muscles.

Basedow's disease.—Stabile galvanisation with the anode over the great nerves in the side of the neck and the cathode between the shoulders.

Blepharospasm.—Anodal galvanisation at the outer corner of the eye (10 per cent. cocaine cataphoresis sometimes useful).

Brain, organic disease of.—Electricity useless, except a mild galvanic current only and without interruptions as a *placebo*.

Bulbar paralysis.—Faradaism or galvanism as needed to contract the muscles of the tongue, lip and pharynx.

Bell's palsy.—See neuritis.

Catalepsy.—The faradaic brush to the surface of the body; phrenic faradisation.

Cephalalgia.—Stabile galvanisation of the head; the static breeze.

Cervico-brachial neuralgia.—Stabile anodal galvanisation over the painful nerves, the cathode on the back or in the hand.

Chorea.—Faradaism useful to exercise the muscles, which are sometimes paretic, but only after the choreic movements have ceased.

Coccygodynia.—Stabile anodal galvanisation at the coccyx with the cathode on the abdomen.

Contractures.—Faradisation of motor points to exercise the rigid muscles and especially their opponents.

Deltoid paralysis (circumflex nerve).—Faradaism to exercise the muscle.

Depression, mental.—General faradisation.

Dyspepsia, nervous.—General faradisation and faradaic baths.

Diphtheritic paralysis.—Exercise of muscles with the faradaic or galvanic current, as required, at motor points.

Enteralgia.—See *abdominal neuralgia.*

Exophthalmic goitre.—See *Basedow's disease.*

Enuresis nocturna.—Sometimes relieved by vesical faradisation with one electrode on the symphysis, or one urethral electrode introduced into the bladder, the other applied to the sacrum ; moderate current with interruptions.

Erb's paralysis.—Faradisation or galvanisation, according to the reaction, at motor points, to exercise the affected muscles.

Facial paralysis.—See *neuritis.*

Facial tic.—See *spasm.*

Gastralgia.—Anodal galvanisation of the epigastrium with the cathode on the back.

Genital neuroses and psychoses.—General faradisation.

Hallucinations.—Galvanism and faradaism have been known, in a few cases, to stop hallucinations of sight and hearing, probably by suggestion ; the poles to be applied to the affected organs.

Headache.—See *cephalalgia.*

Hemicrania.—See *migraine.*

Hemiplegia.—Faradaism to exercise the muscles and prevent contractures ; the faradaic brush in the presence of hemianesthesia.

Hypochondriasis.—General faradisation.

Hysteria.—Faradaism in paralysis and contractures ; the faradaic brush in anesthesia ; general galvanisation sometimes useful ; the static current for suggestion.

Locomotor ataxia.—Galvanisation of the spine employed usually, but of no actual benefit; anesthesia to be treated with the faradaic brush ; lightning pains with the galvanic anode (occasionally cocaine cataphoresis).

Lumbago.—The faradaic brush for counter-irritation ; the galvanic anode to the painful region.

Melancholic stupor.—General faradisation.

Migraine.—Galvanism with one pole on each mastoid process ; stabile, from five to ten minutes.

Mastodynia.—Anodal galvanisation of the painful spot, the cathode on indifferent point.

Multiple spinal sclerosis.—Galvanism is used, but is of no actual service.

Musculospinal paralysis.—Faradisation of motor points if the extensors react; otherwise galvanism, with the cathode to contract the muscles and improve nutrition.

Myelitis.—Galvanism of the spine; faradaism to spastic muscles; the faradaic brush for anesthesias; the galvanic anode for pain; the cathode or anode for atrophied muscles.

Neuritis, multiple, alcoholic, arsenical, lead, meta-diphtheritic, rheumatic, and the like.—If the muscles react to faradaism, exercise them with that current; if not, use galvanism; labile galvanisation to improve nutrition.

Neuralgia.—The faradaic brush is occasionally useful over the painful region, but the stabile galvanic anode is the best, and when superficial nerves are affected, cocaine cataphoresis (a 10 to 20 per cent. solution).

Neurasthenia.—General faradisation or galvanisation, or the static current for suggestive purposes.

Neuroma.—When superficial, cocaine cataphoresis.

Oculo-motor palsies.—A sponge anode over the eyeball; mild stabile galvanisation.

Pianist's cramp.—See *professional neuroses.*

Phrenic-nerve stimulation.—Both sponge electrodes to the two phrenic-nerve points, or one over the nerve and one at the epigastrium; faradaic current, interrupted every two or three seconds.

Pleurodynia.—Stabile galvanisation with the anode to the painful point, or the faradaic brush to counterirritate.

Poliomyelitis.—Labile galvanisation to improve the nutrition of atrophic muscles and to exercise them.

Progressive muscular atrophy.—Galvanism to improve the nutrition and exercise the atrophied muscles.

Professional neuroses (writer's, pianist's, compositor's, and the like).—Faradaism to exercise the muscles; galvanism to improve the nutrition.

Pseudo-hypertrophic paralysis.—Local galvanisation and faradisation of muscles.

Ptosis.—See *oculo-motor palsies.*

Sacral neuralgia.—See *neuralgia.*

Sciatica.—A large, flat sponge anode over the painful points, with the cathode as far away as possible; stabile galvanisation; a steady, strong current, without interruption, for fifteen minutes daily in recent cases. In old cases electricity is of little value.

Spasm.—Electrical treatment of the cause (neuritis, neurasthenia, hysteria, peripheral irritations, and the like); the galvanic anode to the nerve involved and over painful points. Cocaine cataphoresis is useful in superficial nerve spasms (blepharospasm, facial tic, and the like).

Spinal cord diseases.—Spinal galvanisation; a steady current, as strong as can be borne (from ten to fifteen milliampères), without interruption; either pole at the nape of the neck and the other on the lumbar region. The distinction between ascending and descending currents in the treatment of chronic diseases of the spinal cord, is altogether absurd. The only value of electrical treatment in such cases is probably psychic.

Syncope.—See *asphyxia.*

Syringomyelia.—The faradaic brush to anesthetic areas; galvanism to exercise and improve nutrition in atrophied muscles. See also *spinal cord diseases.*

Spinal irritation.—The faradaic brush along the spine; general faradisation.

Singultus.—Faradisation of the phrenic nerve. See also *asphyxia.*

Tabes.—See *locomotor ataxia* and *spinal cord diseases.*

Telegrapher's cramp.—See *professional neuroses.*

Third-nerve paralysis.—See *oculo-motor paralysis.*

Tic douloureux.—See *neuralgia.*

Torticollis.—Labile anodal galvanisation of the affected muscle.

Trigeminal neuralgia.—The anode over the painful point (with a 10 to 20 per cent. solution of cocaine); the cathode between the shoulders or in the hand; no interruption; fifteen minutes; fifteen milliampères. See also *neuralgia.*

Vesical paralysis.—See *enuresis nocturna.*

Vomiting (hysterical and nervous).—Stabile anodal galvanisation of the epigastrium, with the cathode on the back.

Wrist-drop.—See *neuritis* and *musculo-spinal paralysis.*

Writer's cramp.—See *professional neuroses.*

Wryneck.—See *torticollis.*

60 WEST 50TH STREET.

DRUGS CONTRA-INDICATED DURING PREGNANCY.—At the head of dangerous substances (*Medical Age*) for the pregnant woman may be placed sodium salicylate, ergot, salicylic acid, and salol; then come purgatives, antipyrin, acetanilid, sulphonal and cocaine.—M. HUGUENIN.

REFLEX EPILEPSY.[1]

By WILLIAM C. KRAUSS, M. D., Buffalo, N. Y.,
Professor of nervous diseases, Medical Department Niagara University; neurologist to the Erie County Hospital.

IN A paper read before the eighty-seventh annual meeting of the Medical Society of the State of New York, on Reflex disturbances in the causation of epilepsy, I entered into the mechanism of reflex epilepsy at some length and am still satisfied, in my own mind, that the etiology there given is as nearly correct as we are at present able to pronounce. I shall quote frequently from that paper this evening, amending and modifying only where my views have undergone a change.

Reflex epilepsy is certainly the most amenable to treatment of any of the various kinds of epilepsy, and hence it deserves careful consideration to be able to distinguish it. Before discussing the etiology of reflex epilepsy, it might be well to know what we mean by epilepsy. I would describe epilepsy as a complex symptom arising from a multiplicity of causes, having for its background a decided neurotic disposition, either inherited or acquired. Reflex epilepsy is that form where the direct causative agent may be traced to some peripheral nerve irritation. The mechanism of such irritation acting upon the brain, causing epileptic convulsions, may be described thus:

We learn by studying the fundamental laws of nature that all matter is in a constant state of motion, and anything that hastens or retards this vibration produces an equivalent amount of heat or heat values. Moreover, that force cannot be annihilated. If destroyed in one form it reappears in another, without suffering any loss. Apply these laws to the human system and we can account for reflex epilepsy perhaps as follows: a perfectly normal nervous system holds sway over a healthy, vigorous organism; the functions of secretion, excretion and assimilation follow closely the physiological laws governing them. The result of these metabolic forces means work, either mental or physical, or both, along some clearly defined channel. The whole system, then, is in a normal state of motion, each fiber and gland working faithfully and assiduously to keep the structure in a state of perfect equilibrium. Perchance a nerve trunk or nerve terminal is subjected to some insult causing obstruction, retardation or interference of its molecular vibration; accordingly, heat units or heat

1. Read before the Section on Medicine of the Buffalo Academy of Medicine.

values are generated because of this irritation, reflected to the great heat center, the brain, and these converted into heat equivalents such as pain, tremor, spasm, and the like, referable to the seat of the initial lesion. This process continuing indefinitely without relaxation, accumulation of heat values ensue and an explosion of nerve force is the result. Reflex epilepsy means, therefore, a state of irritation of the cerebral centers, produced not by a central but by a peripheral lesion.

The line of demarkation between reflex and traumatic epilepsy should be sharply drawn. In the latter the irritative lesion is direct and local, the result of a trauma to the cranium, and the consequent convulsions are in a degree amenable to the surgeon's art, yet not to such an extent as was claimed by observers a few years ago.

It is true that not every scar, ingrown toe-nail, phimosis, pinworm, or what not, begets reflex cerebral disturbance, or else this form of disease would be as wide-spread and prevalent as was the itch during the middle ages. Therefore some other property or idiosyncrasy must be present in order that the conditions be fulfilled. A neuropathic disposition, either inherited or acquired, is the *sine qua non* of this symptom-complex. This need not necessarily be present at the time the irritation commences, but may be saddled upon the system, the result of the tireless, unceasing effort of the brain to counteract the nerve strain. The patient in a short time becomes peevish, excitable, anemic, and the parents will state that the child has of late "become nervous." In those cases of an inherited neurotic disposition the convulsive attacks appear much sooner after the advent of the irritative lesion and, as a rule, the epileptic habit is early and fast ingrafted upon the constitution. This irritation once relieved or remedied, the habit still persists in these latter cases, and to all intents and purposes the patient has the appearance of suffering with idiopathic epilepsy. When such is the case, the nature and origin of the disease is almost impossible to ascertain and the epilepsy is erroneously classified as spontaneous or inherited.

The question may now be asked, What shall we look for in deciding the immediate causation of reflex epilepsy? As a rule, whenever practicable, I have the patient remove all his clothing and examine him thoroughly, beginning with the feet.

Ingrown toe-nails, corns and callouses are not infrequently the cause of epilepsy. Scars about the limbs, disorders of the geni-

talia, incomplete descent of one or both testes, are some of the causes in youth. In girls the condition of the clitoris and mouth of the vagina should be carefully ascertained; also whether there is incontinence of urine or the presence of oxyurides in the vagina or rectum. Hare, in his monograph on epilepsy, says "that it may be laid down as a fact that in all cases in girls, in which epilepsy of unknown cause develops, the vagina should be examined for the presence of any pinworms which may have emigrated from the rectum." The condition of the rectum should not be overlooked, but carefully explored for ulcers and irritating hemorrhoids. Coming to the head we have an extensive field for examination. The mouth, nose, ears, eyes and scalp may all harbor seemingly trivial disturbances, which under other circumstances would pass unheeded and unnoticed. Disorders of dentition, such as faulty direction in the growth of the teeth, hidden fangs, caries, neoplasms in and about the buccal cavity, retained foreign bodies in the pharynx, scars, the result of ulcerative or specific processes about the tonsils, tongue and larynx, polypi and foreign bodies in the nose and ears, disorders of refraction; in short, whatever can impinge, either directly or indirectly, upon nerve trunks or nerve filaments, other conditions being equal, may produce reflex symptomatic epilepsy. These, then, are some of the external causes, and to discover them is easy, very easy, as compared with the probable internal causes. No doubt you are all acquainted with the stomach as a very frequent contributor to this subject. Those of us who pay special attention to nerve diseases receive many cases labeled epilepsy due to stomach trouble. The round worms of the intestines are a common cause and have been recognised as one of the most prolific agents in the etiology of this disease. Disturbances of nearly every internal organ have, according to various writers on this subject, at one time or another produced epilepsy.

There are three organs which observers declare are most frequently associated with this form of epilepsy—the stomach, eyes and penis. The importance of *the stomach* as a primary etiological factor in the causation of reflex epilepsy is, in my opinion, overestimated. I will not deny that the ingestion of indigestible matter invites convulsions, and that after a brisk purge or emesis they disappear. Many patients tell their physician that such was the cause, the starting point of the first attack, and the physician confidingly tells the specialist the same story. They will further

testify that they can foretell the approach of an attack by the voracious appetite, peculiar sensation at the pit of the stomach, vomiting of watery fluid and the patient's desire to eat *anything* and *everything* that comes within his reach. Put this patient on a bland or exclusive milk diet and keep him on it for months, give him pepsin, trypsin, papoid and the like, and if your experience is similar to mine, he will continue to convulse and froth at the mouth, and you are fortunate, indeed, if his parents do not become similarly affected. I believe that in many of these cases we are on the wrong trail and must seek the cause elsewhere. The symptoms denoting gastric affinity are not so much epileptogenic as epileptopathic. These disturbances, as the patient and parents declare, hold a close relation to the paroxysms, and I believe they are only localised epileptic attacks or epileptic equivalents. The increased tension in which the nervous system is held just prior to an attack, stimulates the gastric glandular system, through the sympathetic and pneumogastric nerves calling forth an abnormal secretion of gastric fluids, and the flow of gastric juice means an appetite. The stomach naturally becomes tender and hyperesthetic under such rule long continued, and anything that irritates or demands undue attention is rewarded with stern rebuke. I have seen the stomach perform similar antics in hysteria and general paresis, and yet neither you nor I would affirm that the gastric trouble was the cause of these ailments.

The refractive anomalies and muscular insufficiencies of the eye have come in for a good share of the reflex patronage. A few years ago, the startling announcement was made by a New York physician that chorea, epilepsy and insanity are functional nervous diseases caused by refractive errors, the relief of which, by glasses, would cure these disorders. A little later, this versatile physician shifted his position, or sufficiently stretched the margins, to include muscular insufficiencies as further causes of these affections—hence, tenotomies and prisms would cure what cylinders and spheres had failed to do. The New York Neurological Society, after a thorough investigation of the above claims, failed to substantiate them; and D. B. St. John Roosa, in a valuable paper entitled The relation of errors of refraction and insufficiencies of the ocular muscles to functional diseases of the nervous system, completely exploded this theory. He states:

From an examination of 6,455 eye cases, defective muscular or refractive states do not necessarily produce even *local* disturbances,

such as are comprehended under the term asthenopia, inflammation of the edges of the lids, and the like, although high degrees of hypermetropia, and moderate degrees of astigmatism, and all cases of mixed astigmatism *are apt to do so*, sooner or later.

He further remarks that asthenopia depends chiefly upon two sets of causes, nervous exhaustion and uncorrected errors of refraction. You observe he places a constitutional or general cause first.

In the *Lancet* of October 28, 1893, H. W. Dodd reports 100 consecutive cases of epilepsy, their refraction and their treatment by glasses, in which he states that of the 100 cases 25 did not require glasses, so they were not prescribed. Of the remaining 75 cases, only 52 secured and wore glasses as ordered. Of these 52, he says, 13 have had no fits since wearing the glasses during periods varying from one year to four months. Three cases remained in *statu quo* and 36 improved in a marked degree. Dodd summarises his views as follows: "Given a certain condition of unstability of the nervous system, (*a*) errors of refraction may excite epilepsy; (*b*) the correction of the errors of refraction will, in combination with other treatment, in many cases, cure or relieve the epileptic condition."

The reprehensible practice of saddling a pair of glasses on every patient who comes into the consultation-room, or of doing a tenotomy for every known ache, pain or grunt, has caused physicians to stop and ask whether the *specialty* business, as practised by some, has not become one of fake, fuss and fiction. The substratum upon which all these cases rest, individual susceptibility, or an acquired or inherited nervous predisposition, is entirely overlooked, and a routine treatment is adopted for the mass of patients, instead of an individualised treatment.

The penis as an important provocative agent has long been recognised, but under the same conditions which underlie the reflex disturbances of the other organs. For instance, the prepuce may be too long or too short, adherent or constricted; the frenulum too short, producing a mild form of hypospadias; or the prepuce has never been everted, and large accumulations of smegma are present. Supposing that none of these conditions are found, you have still the most important examination to make—the exploration of the urethra—and how often is it undertaken in these cases? The boy has never had connection, and, hence, you infer no gonorrhea with its attending inflammation and strictures. But try to pass a No. 12 or 15 Benas catheter; and, although they glide along so

nicely at other times, you are beset with obstacles in passing through constrictions, evading the boy's hands, and in convincing him that his urethra is anesthetic and he cannot have any pain. I am thoroughly satisfied that there are many disturbances present in a good boy's urethra which prompt him to vicious habits; and they, in turn, if his constitution is impressionable, lead to serious nervous disorders, such as chorea, epilepsy, neurasthenia, and the like. Vegetations, polypi, cysts or other neoplasms in the walls of the urethra, producing constrictions, hyperesthetic areas, slow forms of inflammation are translated by such symptoms as priapism, spasm of the urethral muscles, frequent micturition, spermatorrhea, masturbation and sexual excesses. The influence of these morbific agencies upon the nervous system is too well known to be here reviewed. In a short period of time, I have treated six boys with reflex neuroses, five of whom had reflex epilepsy, due to disturbances along the urethral canal. In some of these cases I have found the meatus urinarius surrounded by a red border or ring, portraying, perhaps, the congestive state of the urethral lining. An urethroscopic examination should never be omitted, for by its revelation the exact nature of the lesion can be determined.

To sum up the subject of reflex irritation, I will quote the conclusions of Ayres, in a recent number of the *Pittsburgh Medical Review:*

With reference to reflex irritation, there are three classes of patients:

1. Those persons of normally robust organisations, on whom ordinary irritations play in vain; their equilibrium cannot be disturbed by anything short of a decided cause.

2. Those persons of unstable nervous systems, who are susceptible to reflex disturbances, but from careful avoidance, and other fortunate circumstances, largely escape their effect.

3. Those neuropathic, sensitive constitutions, so delicately balanced that a single depressing or irritating agent will throw them into an abnormal or pathological state.

Gray's conclusions in regard to diseases of the male and female genital organs to mental and nervous diseases are worthy of careful consideration. He says:

1. There is no proof that genital irritation, in the male or female, can cause nervous or mental disease, except in a predisposed individual.

2. That the proof is not yet absolute that genital irritation can produce nervous or mental disease even in a predisposed individual.

3. That there is undoubted proof that the relief of the genital disease, in the male and female, will often relieve certain nervous diseases, such as migraine, hysteria, epilepsy, simple nervousness and hallucinatory insanity.

In conclusion, I wish to report two cases of epilepsy, one reflex and the other traumatic:

CASE I. Bessie B.; age, 3 years, 10 months; weight, 31 pounds; height, 37 inches; constitution, rather delicate; complexion, fair; hair, brown; eyes, blue.

Antecedents.—Parents both living and healthy, offering no hereditary taint of any kind; no history of syphilis or tuberculosis.

Early History.—Born at full term. Dentition passed off smoothly, with the exception of some slight gastric trouble, which lasted but a few days; had no convulsions of any kind. She learnt to walk in her tenth month. When two years old she was troubled with ascarides, diagnosticated by their presence in the feces, condition of the child and reflex phenomena. She did not, however, at any time fall into convulsions.

At three years she passed through a severe attack of whooping-cough. Otherwise the child passed its early infancy without any serious disturbance; seemed to be in perfect health, never complaining, always bright, active and cheerful.

Status Præsens.—Rather anemic, but well-developed child, offering no particular stigmates, except the one to be described later on. Sensation, mobility and organs of sense unimpaired; organs of secretion and excretion in good working order; no glandular enlargements, and percussion of head is not sensitive. Of late, she has become uneasy, restless, touchy, or, as the mother aptly terms her condition, "she has become nervous."

On March 8, 1888, as the mother was scrubbing the floor, the child, unnoticed, entered the room, stumbled and fell sideways into the tub of boiling water. The outer side of the left leg, from the hip to the foot, was badly burned and blistered. She was put in bed, suffered great pain for two weeks, then made a rapid recovery. At first she was timid about walking, and limped about for some weeks, complaining of pain at the left knee-joint. An examination of the left leg revealed a cicatrix, nearly quadrilateral in shape, situated at the bend of the knee. With the leg extended it measured five centimeters in length and varied from four to five centimeters in width and was locaated on the outer side of the leg, between the outer edge of the patella and the tendon of the biceps muscle. Free movement of the knee-joint is not interfered with. The cicatrix is non-adherent, tender and painful, of a pinkish color and presents one nodosity, cordlike in appearance.

In May, 1888, the mother noticed that at times, while the child was

walking, she would suddenly stop, the left leg would stiffen, and the toes, acting as a fulcrum, the whole member would rotate outward, the child's expression would change, but it remained conscious, complaining of a pain, seeming to radiate from the vicinity of the knee-joint. The attacks lasted from one to two minutes. No other phenomena were noticed, and the mother thought the trouble was caused by a faulty shoe.

These attacks occurred at first once daily, and later on twice, continually growing more severe until the extremities became affected. About November, 1888, the child would awaken at night, generally soon after retiring, cry out, the legs would stiffen, then would kick violently for a few moments. The arms remained motionless; no incontinence of urine, no frothing at the mouth and no loss of consciousness. These attacks lasted from three to five minutes, the mother thinks, and would occur nightly for some time, then cease for one or two weeks. Soon these spasms became general. The arms as well as the legs would be seized with tonic, then clonic contractions, followed by loss of consciousness, incontinence of urine, frothing and bleeding at the mouth, pathognomonic symptoms of classical epilepsy. This condition of things existed at the time that I first saw the child, in September, 1889.

I made a diagnosis of epilepsy of reflex character and laid out the following treatment: the cicatrix being too large for excision, I advised painting it daily with collodion. Internally, I prescribed equal parts of the bromides of soda, ammonia and potassium, 5 grains three times daily, and the administration of cod-liver oil. On this treatment the child reacted nobly and the attacks became less severe and less frequent. After two months' treatment the cicatrix appeared more healthy and not painful to pressure. At the end of six months the attacks had disappeared, and since then there has been no recurrence. The bromides were gradually dispensed with, and at the present time (April 5, 1895,) the parents consider the child cured.

CASE II.—*Traumatic Epilepsy.*—W. T., of Attica, N. Y.; age, 24; height, 5 feet 8 inches; weight, 165 pounds; constitution strong and healthy. Nothing in his antecedents or early life is worthy of special consideration. When twelve years of age an accident befell him, on a Fourth of July, which proved to be the cause of his later misfortune. Some boys, having procured the barrel of an old gun, were engaged in discharging it to help celebrate our national holiday. The gun flew into the air and, on descending, struck the patient on the left frontal region of the head. He was carried unconscious to a physician's office, who removed several small bony particles of the skull and sewed up the wound. Suppuration set in, which continued for a few weeks, and the boy seemed to have recovered fully from the effects of the injury. About six years ago, six years after the accident, he began to notice that he felt unusually drowsy, dull and stupid on awakening in

the morning. This condition lasted for some time, the cause undiscovered, until he was found in an epileptic attack by his room-mate.

He consulted several physicians without obtaining any relief. In the Fall of 1890, he consulted me, and, without any success, I prescribed bromides. I made a thorough examination, and found a large deep depression over the left frontal bone, the posterior edge extending through the coronary suture. Up to this time he had been able to work hard on a farm, but would have the nocturnal attacks.

On May 2, 1891, I was called to see him, and found him in one of the attacks. He was sitting in a chair, his eyes wide open, glassy, staring, his head drawn to the left, speechless, but not exhibiting any sign of convulsions.

These attacks were growing more frequent, had become diurnal as well as nocturnal, and some radical procedure was demanded. Two days later, I was again called to Attica, and I requested Dr. Mynter to accompany me and operate. On our arrival, we found the patient in the status epilepticus, the attacks being no longer intermittent but continuous, without longer intervals than a couple of minutes. He had been in this condition for thirty hours, one attack of convulsions following the other without the patient regaining consciousness. The pulse was weak and rapid, face cyanotic. A large depression, covered with a tight, whitish, adherent scar, was seen, as described. A large curved incision, convex backwards, was made, the scalp loosened with difficulty from the bone, and an irregular defect of bone found under the scar. The surrounding edges of the bone were much hypertrophied, strongly adherent to the dura and pressing it inward. The dura was loosened all around from the hypertrophied bone, which thereafter was removed all around the defect with cutting forceps.

During the following day he had six attacks, but thereafter he improved rapidly, and he soon returned to his work a well man. No attacks occurred for seventeen months; he was married and felt well, but continued the treatment with bromides. On October 7, 1892, he consulted me again, and stated that the attacks were returning and were becoming daily more frequent. I induced him to enter the Sisters of Charity hospital, where he could be kept under close observation. The attacks, similar to the previous ones, grew daily more severe, and after three days he was again in status epilepticus. Dr. Mynter operated for the second time, opening the wound, detaching the dura from the edges and removed the hypertrophied bony edges. He recovered quickly from the operation and had one spell during the first twenty-four hours. On November 6, 1892, he was discharged, apparently cured, but with the injunction to continue the bromides for an indefinite time. Up to today he has remained free from attacks and has resumed his former occupation.

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THE CRIMINAL'S PLEA OF IRRESPONSIBILITY.[1]

By JAMES W. PUTNAM, M. D.,
Clinical professor of nervous diseases, University of Buffalo.

SINCE the acquittal of McNaughten, in England, on the ground of insanity, there has been an increasing humanitarianism on this subject. Formerly, only that form of mental disease which brought its victim to the level of an unreasoning wild beast, or of a driveling idiot, was recognised as an excuse for crime. Today, any form of mental disease can be brought forward as a plea for the acquittal of criminals. This is a fact as well understood by the criminal classes as by the legal or medical professions.

The criminal not only knows that insanity is a sufficient plea for acquittal, but, also, that public opinion is against holding an insane person responsible for crime. The criminal can judge from the details of medical testimony, published in the papers during the progress of all important trials, just what may be considered as bearing weight in coming to a diagnosis of insanity. Among other things, he learns that it is important to him to have all the family record quite familiar to him; that intermarriage of cousins as parents is not a bad starter; that an insane or epileptic uncle, or aunt, or grandparent is a good thing to remember; that epilepsy in the family is of value in proving a neuropathic tendency.

Alcoholism in father or mother is now to be brought into court as bearing upon the criminal's tendency or liability to insanity or to his neuropathic taint. Then, as to the personal history of the criminal, convulsions in childhood, cruelty to animals or to children, falls upon the head, tendency to headache—all these things are very important and must be remembered, and if they never occurred it is well to manufacture them, so as to have the detailed history ready for use on an emergency. The record of his boyhood, at school in sports if quarrelsome, if peevish, if given to going alone and not joining with others—all these things have, time and again, in different noted cases, been brought forward as connecting links in the chain of evidence for insanity. These things we know and the lawyers know, and before the trial the prisoner and the prisoner's family and friends know.

They know, also, that to hear voices at night, to be suspicious of one's friends, to have ideas that people are against him, to for-

1. Read before the Buffalo Medical Club.

get the details of a crime, all have weight with doctor and jury. With all this knowledge the criminal of the higher class, who is caught red-handed and who has no chance of escaping the penalty of the law by proving an alibi, or extenuating circumstances, pleads not guilty, but insane.

As public sentiment stands, criminals are acquitted today, by reason of a certain deviation from an ideal, moral or intellectual type, who would not have been acquitted ten years ago. Such cases are the paranoiacs, the victims of certain forms of melancholia and cases of psychopathia sexualis. Yet none of these are so mentally affected that they come under the ruling of English judges, which is, that the criminal cannot be held responsible if, at the time of the commission of the act, he was incapable of distinguishing right from wrong and did not know that the act was an offense against the laws of God and nature.

Lord Deas, of Aberdeen, charged as follows: "If the jury believed that the prisoner, when he committed the act, had sufficient mental capacity to know and he did know that the act was contrary to the law and punishable by the law it would be their duty to convict him."

Judge Smith, in Rochester, New York, charged: "A man must have sufficient knowledge, reason, capacity and mental power to understand not merely that his act is in violation of law, but that it is intrinsically wrong."

Recorder Hackett said: "By the state of insanity I am to be understood as meaning the state under which a man is not accountable for an alleged criminal act, because he does not know that the act he is committing is unlawful and morally wrong and has not reason sufficient to apply such knowledge and to be controlled by it."

This ruling is, to me, correct as far as it goes, but I think it does not go far enough. It does not include those undoubted criminals who know an act is wrong, but have no power of control. As, for example, the insane woman who murders the child she loves after having resisted the desire to kill it on previous occasions and finally yields to it.

Ordronaux includes this idea in his summing up of the questions to be determined in relation to criminal responsibility:

Whether, knowing the nature and consequences of the act, he had the power to choose between doing and not doing it, and whether, supposing he had lost the power of choosing between right and wrong in reference to the particular act, he had lost that power through disease

and not through intoxication, violent anger or any form of self-produced mental convulsion.

This last phrase—mental convulsion—I do not fully understand, as it is not sufficiently definite. These tests, it will be seen, would not excuse the act of Prendergast, who knew that murder was wrong, and who murdered to avenge a fancied wrong, although the evidence tends to show that he was insane prior to his crime. It does not include, nor do I claim it should include, the great majority of sexual perverts. Because one man has an unnatural lust for another, and because, later, his beloved leaves him, proposing to marry, if the pervert murders either him or his ladylove to soothe his wounded feelings, I see in that no excuse for crime, no evidence that he did not know right from wrong, no evidence that he could not have controlled himself, but that he *would not*. And, right here, I ask, is it not possible that the fact that the pervert knows that his failing is recognised by some as insanity and as an excuse for crime, for they all know this since the Alice Mitchell and Freda Ward case, that he may feel that it is not necessary for him to control himself? It has seemed to me that there is a certain danger in this feeling of security that many men must have, that, no matter what they do, they will be acquitted. Take, for instance, the criminal who has committed crime, who has had insane ancestors, and who himself has been adjudged insane at a former trial, and has afterward been discharged recovered from an asylum. Let him out in the world, and I believe he feels secure that future crimes will go unpunished, and I share in his belief. He, in all probability, would go unpunished, whether at the time of the commission of a crime he was sane or insane, because his former attack would be of great weight with the jury, and because he would know the value of his former delusions and hallucinations.

Take the case of the epileptic, the educated criminal, who is up in the history of crime and its defense, knows that the post-epileptic state is an irresponsible one, knows that the psychical equivalent for epilepsy is an excuse for crime, is a state of irresponsibility. I do not see why the epileptic is not quite free, in his mind, as to the consequences of any crime he may choose to commit, but I believe few juries would convict a well-defended criminal who was an epileptic, even if that epileptic knew right from wrong, and hosts of witnesses testified to his mental capacity. I have chosen to write this paper to point out some of the dangers of the present

views of insanity. In common with others, I firmly believe in the irresponsibility of some lunatics. But I also believe that many lunatics commit crimes deliberately, with malice, for which they are responsible, and in which they are protected by science. There are some forms of insanity, such as mania, dementia, profound melancholia and chronic lunacy, which all agree are excuses for crime. But transitory mania, in which the man was sane up to the commission of crime, insane during the crime, and sane afterward, must be looked on with suspicion. Alleged delusions must be well proved not to be lies before they are accepted as proof of insanity. Because a criminal, arrested for theft, tells us he owned the store from which he took the goods, we must not necessarily infer he has a delusion. It is possible he lied. If a man murders another and, in jail, tells us calmly he did it because God commanded him to do so, we must remember that a sane man would gladly say that if it would clear him; or if he says the victim was one of a band of conspirators, it must be still further sifted. There is, in many cases, a tendency to believe that all the stock statements of lunatics are proofs of lunacy. Of course, this is not denying that they are not to be investigated and given their full value.

The question of drunkenness as a defense for crime has been summarised by Clark Bell from English and American laws:

While drunkenness is not, *per se*, a defense upon a charge for crime, yet mental unsoundness, superinduced by excessive intoxication and continuing after it has subsided may excuse; or where the mind is destroyed by a long-continued habit of drunkenness, or where the long-continued drunkenness has caused an habitual madness which existed when the offense was committed, the victim would not be responsible. For if the reason be perverted or destroyed by a fixed disease, although brought on by his own vices, the law does not hold him accountable. The rule of law is well settled that evidence of intoxication is admissible to explain the conduct and intent of the accused in cases of murder. This rule does not apply to other crimes where the intent is not a necessary element to constitute a degree or phase of the crime.

In cases where the law recognises different degrees of a given crime and provides that willful and deliberate intention must be actually proved to convict of the first degree, it is a proper subject of inquiry whether the accused was in a condition of mind to be capable of premeditation. The reason of this is that the fact of intoxication is an aid to determining whether the act was the result of deliberate and malicious intent and because, as the New York penal code says, section 22: No act committed by a person while in a state of intoxication shall be deemed less criminal by reason of his having been in such a

condition. But whenever the actual existence of any particular purpose, motive or intent is a necessary element to constitute a particular degree of crime the jury may take into consideration the fact that the accused was intoxicated at the time.

There has developed, in late years, a class of citizens who are inclined to quarrel with this law. Notable among these is Dr. T. D. Crothers, who recently testified in Buffalo on a murder trial. He said, in his opinion, that the effects of one drink of whisky upon the brain would never be removed, and testified, in substance, that any man who had ever taken alcohol was not responsible. This did not appeal to Buffalo jurymen, and the criminal was convicted. Dr. Crothers, with a numerous following, is striving to have crimes committed by drunkards placed in the same category as crimes committed by the insane. From my reading of this subject, this seems a most dangerous position, so far as society is concerned. Were such a theory to hold, we could only punish criminals who were total abstainers, or, at least, very moderate drinkers, a class not common these days, and would be very rare indeed if all that were necessary to plead not guilty with success was to have a record of a few previous intoxications.

I have thus outlined many of the points which arise in the criminal's view of the plea of not guilty because irresponsible, not so much to impart new ideas as to provoke discussion.

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NOSOCOMIAL HYGIENE.

BY STEPHEN YATES HOWELL, M. A., M. D., M. R. C. S., Eng.
Gynecologist to the Erie County Hospital, Buffalo, N. Y.

FROM the earliest times it has ever been a universally recognised fact that when a patient was isolated from all others who might be in need of the healing art, his chances of recovery were enhanced, *ceteris paribus*. And even today such a view is doubtless correct, though materially modified by the brilliant advances made since Lister first promulgated his startling doctrines in the dawn of the last quarter-century. It was on the score of convenience and with an eye to economy, chiefly, that the sick were aggregated in buildings specially arranged for their reception and care and from two or three centuries before Christ to the present day, from the primitive constructions of the Buddhist

priests of Hindostan to the colossal piles of the nineteenth century, the evolution of the hospital may be traced. While the advantages of thus grouping ailing humanity were easily recognised, its evils were equally apparent and the chronicles of all these centuries teem with references to the baleful effects of crowded wards, putrid exhalations and poisoned air. In 1778, Dr. Jones, to whose efforts the New York Hospital partly owed its existence, reported the frightful condition of affairs in the large hospitals of England and France, which he had visited shortly before. One-third of all the deaths in Paris were said to have occurred in the hospitals, the old Hôtel Dieu losing annually 20 per centum of all admitted patients.

Later, the frightful mortality witnessed by Florence Nightingale caused her to doubt whether hospitals had not destroyed more lives than they had preserved and, in 1869, Sir James Y. Simpson coined the word "hospitalism" to express "the hygienic evils which the system of huge and colossal hospital edifices has hitherto been made to involve." In consequence of the terrible mortality, the destruction of all old hospital buildings and their replacement with new structures was seriously discussed in England. Instead of constructing large, imposing piles of brick and stone, it was recommended that hospitals be small fabrics of wood or iron, which could be destroyed without great pecuniary loss when they became "pyemia stricken," as Erichsen characterised it. During and subsequent to our own civil war the use of wooden barracks and of tents, for hospital purposes, was advocated by the army surgeons for the same reasons. But it is useless to elaborate this theme; most of us are familiar with it, for we have witnessed personally the old pre-Listerian and the modern post-Listerian order of things. With the discovery of the vegetable microbes and the detection of their evil mission, the curtain of ignorance which had shrouded all past ages with the darkness of despair, was lifted and a new life dawned for humanity. Physicians and surgeons ceased to theorise so vaguely concerning the nature and origin of pus, and even turned a cold shoulder upon the once "laudable" variety; the ambiguous nomenclature of a pathology founded only too largely upon doubt and ignorance gave place to the direct speech which ever characterises knowledge; the etiology of sepsis being understood, the searching cleanliness of today superseded the superficial and weak detergent efforts of the past; the microbic offenders being recognised, many extrinsic and intrin-

sic agencies which tend to compass their destruction, before and after their invasion of the animal organism, have been successively discovered—antiseptics, the chemotactic and phagocytic activities of embryonal cells and the immunising properties of blood-serum.

Keeping pace with this rapid advancement of scientific knowledge is the natural desire to secure to humanity all the advantages to be derived from it. Not only should every provision be made for the exclusion of pathogenic microörganisms from our homes for the sick, but the patient's powers of resistance should be enhanced in every possible way. They should be supplied with fresh air in abundance and for this purpose a constant flooding of the wards through automatic air-conduits is to be preferred to the precarious employment of mechanical devices; suitable food and intelligent nursing should be provided; gastro-sepsis and entero-sepsis should be combatted, and, finally, all pathological conditions and depressing influences should be removed and avoided as far as possible, in order that the sufferer's ability to cope with bacterial foes may approach that of the healthy individual as closely as possible. The environment of our patients, then, should be such as would most materially aid in their restoration to health; in other words, it should be healthy. A healthy hospital has been defined by Mr. Simon to be one "which does not, by any fault of its own, aggravate ever so little the recovery of the persons who are properly its inmates; and the fault of its own, through which an unhealthy hospital fails to attain the best results for its medical and surgical treatment, is of two kinds—either it is an inherent fault, as of site and construction, or else it is a fault of keeping, as dirtiness or overcrowding, or neglect of ventilation."

Now, it is by no means my intention to enter elaborately into the discussion of all the features of the perfect hospital, want of time and space both precluding such a course, but I would emphasise the fact that in the construction of the most recent examples of hospital architecture a vast amount of labor and careful thought have been expended in the endeavor to meet the manifold problems which confront the builders. I would be suggestive rather than exhaustive and to that end have chosen as my theme the subject of hygiene, the importance of which is so frequently attested by the writings of others. Carefully conducted experiments have shown that the air in mid-ocean is perfectly sterile, but as land, and particularly the habitation of man, are approached, the presence of minute forms of vegetable life in the atmosphere becomes proportionally

evident. While we admit that these are usually of a non-pathogenic character in interiors where ventilation is free and where even ordinary cleanliness has been observed, and conceding that the air in such localities may be well-nigh neglected as a medium of infection, still such is not universally the case. Should defective plumbing permit the free discharge of sewer-gas into our wards and operating-rooms, trouble is sure to ensue. Sore throat, attended with fever and other evidences of systemic disturbance of variable severity supervene; our operation-wounds are invaded by pus-microbes and suppurate; in short, the familiar scenes of the old-time hospital are reënacted. The mere presence of bath-rooms, closets and sinks in our wards is a constant menace to the health of their occupants. Plumbers are proverbially incompetent or careless, and plumbing fixtures are subjected to the strains of settling walls and floors and to the wear and tear of actual use, and hence it is unreasonable to place any great reliance upon either. A defective trap, a broken joint, a cracked sewer-pipe and many other accidents of like nature, and in ofttimes unsuspected localities, afford entrance to the sewer-gas, laden with noxious germs, to the detriment of the building's occupants.

In the ideal hospital all drains should be outside the foundation-walls, while connected fixtures, such as closets, bath-rooms, sinks or basins should be in rooms which communicate with the main building or wards only through well-ventilated lobbies, corridors or galleries. The practical working of such a plan has been admirably exemplified at the Preston Retreat in Philadelphia, in which institution the freedom from puerperal sepsis, under Dr. Joseph Price's management, has been unparalleled. In the Johns Hopkins Hospital, in Baltimore, the Sloane Maternity, in New York, the St. Denis Hospital, of Paris, and the Antwerp Civil Hospital similar, though not always equal, precautions have been taken to insure the absence of any sepsis-laden effluvia from the drains.

One of the latest and most convincing articles in support of this position appeared in the January number of the *Annals of Gynecology and Pediatry*, as a contribution from the pen of Dr. A. Lapthorn Smith, of Montreal, and in view of its illustrative value I may be pardoned for the introduction of the following extended quotation:

Three years ago I took the service of a colleague who was absent on a Summer holiday, and obtained union by first intention almost invariably both in the abdominal incisions and in my operations on the

cervix and perineum, and after a removal of the breast. A few months later the absent one returned, when the Autumn winds rendered it more pleasant to have the windows closed. What was the result? Suppuration was occasionally seen in the wounds and now and then a cervix or a perineum failed to unite. In my own mind I attributed this difference in healing to my friend being a little less scrupulous in the exercise of aseptic precautions. But in this I wronged him, as it was afterward made clear. My regular term of service came round on January 1st, when the double windows were on and all the cracks were pasted up with paper or stuffed with cotton, it being difficult, even then, in very cold weather to keep the building comfortable. Taking especial pride in getting my wounds to heal without suppuration I redoubled my aseptic precautions, but they did no better than my colleague's, who had just finished his term of service. First, in a case of Alexander's operation, which at my private hospital always had healed by first intention, at the other institution the edges next day became a little red and around the stitches there was a little thickening, and a day or two later the wound was suppurating. Then I learned from my friend in charge of the obstetrical department on the top flat of the building, that in spite of every precaution he was having a series of high temperatures in every woman who was confined. Next a case of curetting and repair of the cervix and perineum under my care suddenly developed a high temperature—an almost unheard-of thing heretofore. She looked so ill and her pulse became so rapid, that a thorough examination was made, when a diphtheritic membrane was found covering the cervix and perineum. This was thoroughly cleaned with strong bichloride of mercury and frequently douched with the same, and the patient was placed on a very supporting diet. I felt sure that there was something wrong with the drainage and requested the authorities to have it examined. Several of the authorities took a different view of the cause of the outbreak, attributing it to a visitor who had a child sick with diphtheria, having visited a patient in another ward. Besides, they claimed that they had had the drainage overhauled during the previous Summer. Then several other non-operative cases developed sore throats, as did some of the resident staff. Then three cases of midwifery on the top flat developed diphtheria of the womb and vagina, one of them dying very quickly of a sort of gangrene of the uterus, another one dying a week later, both in spite of the most active treatment with peroxide of hydrogen, and the like, and a third one being cured with great difficulty.

Then all the patients were sent home and attended there by their respective surgeons and physicians, where all recovered. ' Then the authorities had the plumbing examined by means of the smoke test, which consists in placing a box on the roof of the building near the ventilating soil pipe, with which the smoke box is hermetically con-

nected. Some cotton waste, impregnated with some oleoresinous material, is lighted and gives out a great quantity of pungent, yellow smoke, which is forcibly pumped down the soil pipe, until it reaches the sewer.

If there is the slightest leak of sewer-gas in any of the pipes, of course, this smoke will escape equally as well. The sewer-gas cannot be seen or even sometimes smelled, but the smoke of the smoke-box can be both seen and smelled as it pours forth from any defect. In the case under notice the pipes were found to be all staunch and faultless, but a vast stream of smoke was seen to emerge from a three-inch hole in the concrete floor of the laundry, and on further investigation it was found that this hole connected directly, without any trap whatever, with the soil pipe running into the sewer.

This was a plumber's blunder, but it cost two lives and a great many more long and tedious convalescences, both of gynecological and obstetrical cases. This defect was at once remedied and work begun again, wounds all healing, as a rule, by first intention and a high temperature in the obstetrical ward being the exception.

Two cases of severe puerperal septicemia, one in a home of wealth where great attention had been bestowed on the sanitary arrangements also occurred in Dr. Smith's practice and in each house the smoke-test disclosed plumbing defects which permitted the free ingress of sewer-gas. The greater frequency of puerperal fever during the winter months, when windows are left closed and oftentimes sealed, is a most suggestive fact in this connection and its occurrence should naturally excite our suspicion that plumbing defects were at the bottom of it. In concluding his article, Dr. Smith says :

I would, therefore, lay it down as a wise rule to follow that whenever we have suppuration of our wounds or high temperatures after confinements, notwithstanding that we have employed the most rigorous aseptic and antiseptic precautions, we should in every case suspect the plumbing, until it shall have been proved innocent, and for this no test should be accepted as sufficient except the smoke-test.

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NEPHROPEXY BY LIVING TENDON.—M. Poullet has reported a successful case in which a tendon of the longissimus dorsi muscle was detached at its upper end from its muscular belly and passed so as to make a loop through the posterior part of the capsule of the kidney, thus supporting and holding the kidney in its proper place. This is probably the first case of the kind where a living suture was used.—*Boston Medical and Surgical Journal.*

THE WATERS OF CONTREXÉVILLE AS A CURE FOR CERTAIN ARTHRITIC CONDITIONS.

By DR. DEBOUT D'ESTREES, of Paris.

IN AMERICAN cities the tendency to arthritis is so frequent in the upper classes that, from a medical point of view, it may be regarded as one of their distinguishing characteristics.

Generally hereditary, this diathesis is kept up by the peculiar every-day life and hygienic conditions of those who live expensively. Let us consider the offspring of this class and follow the various phases of his life. As soon as the child can eat, he is overfed; at school he is overdriven intellectually whilst taking insufficient physical exercise. Later on, social obligations render it necessary for this same subject, now an adult, to take a daily share in dinners, which are so many infringements of the hygienic diet he ought to follow. Afterward, during the period of digestion, he goes to the theater, to evening parties, to his club, where he sits up late in an overheated atmosphere, where the air is vitiated, and at a time when his system is craving for oxygen to carry off, by the process of combustion, the effects of overfeeding.

The urine is overcharged, highly colored, and a deposit is oftentimes noticed in it; the patient is quite surprised by the unexpected advent of the first nephritic colic. The constant strain on the nervous system, the artificial diet peculiar to large towns, render oxalic gravel a frequent complaint. This oxalate of lime diathesis, so common in all parts of Europe and a special subject of study in the vast experimental field of Contrexéville, where persons so afflicted make up the great majority of patients, give rise to hematuria, to those intense dyspeptic troubles so frequently met with in America, to nervous phenomena which put an entirely new complexion on the character of the case.

Of the calculi, those composed of oxalate of lime are the hardest, the roughest and most pointed externally, and are the most likely to tear the mucous membrane during an attack of nephritic colic; they are always found to be stained with blood when definitely expelled *per vias naturales;* or if they form a stone in the bladder, lithotrity is powerless to break them up.

The urico-oxalic diathesis may likewise appear in the form of gout. Instead of symptoms of gravel, or even concomitant with them, an attack of gout occurs, first in the great toe, then in the hands; there is a certain amount of deformation and, possibly,

tophi and nephritis, which is always ready to attack the gouty subject with unsparing severity.

Now, the Contrexéville waters are peculiarly adapted to the treatment of these cases; it is simply necessary that the patient should pay reasonably strict attention to diet and hygiene, to keep in a fair condition of health. This, unfortunately, by reason of the universal habit in America of subordinating everything to the demands of business and the rushing which prevails in social as well as commercial circles, is at the present epoch a hopeless prescription.

The physician who treats an arthritic subject is asked to keep his patient in a degree of health that will permit him to transgress many of the laws primarily essential to the maintenance of both nervous and physical systems in satisfactory working order. It is in this class of cases that the Contrexéville-Pavillon water is invaluable in guarding the kidneys from nephritis, the bladder from stone, and the joints from gouty deposits, by eliminating through the kidneys, day by day, the organic waste, the accumulation of which in the economy gives rise to the grave disturbances enumerated above.

Dr. Pâtissier, a member of the Paris Academy of Medicine, in a report read before that distinguished body, familiarly described this water as the "friend of the stomach." It certainly has a prompt and decided action in relieving acute attacks of hyperchlorhydric dyspepsia and periods of digestive inactivity.

My plan of treatment in a condition of arthritic diathesis has been to order the patient to drink a bottle of Pavillon water before breakfast, a glass at intervals of twenty minutes, with an interval of from three-quarters to one hour between the last glass and the first meal, this treatment to be continued until the morbid condition is rectified. The water is easily and rapidly absorbed, and, when taken in the morning, prepares the stomach for the rapid digestion of the daily meals and keeps up the freedom of the intestinal functions. It can also, and most advantageously, be mixed with wine, which it does not render turbid, like alkaline waters, and to which it does not give any special taste. Thus the diuretic action will be continued and completed, while the peristale of the digestive tract is sufficiently strong to ensure facility of digestion and the daily regularity of the alvine evacuations.

It must be borne in mind, however, that this practice does not do away with the necessity of the true method of treatment with

this water, when prescribed in nephritic colic or acute albuminuria, resulting from continued uric acid diathesis, which consists in the absorption, during twenty consecutive days, every morning, on an empty stomach, of a bottle of Contrexéville-Pavillon water, one glassful to be drunk every twenty minutes, one half hour to elapse between the last glassful and the first meal.

Translation.

A REPORT ON SOME EXPERIMENTS WITH TRIONAL.

By DR. THEODORE BEYER.
From the Fourth Division of the Garrison Hospital, Vienna.

Translated from *Wiener Medizinische Blätter*, No. 25, 1895,
By P. J. ROSENHEIN, M. D., New York.

THE high commendations which trional has received induced my honored chief, Dr. A. Tschudi, to employ it in a series of cases. Although, in consequence of the small number of cases reported, it is not possible to give a positive decision in regard to all the different properties of trional, we are justified, nevertheless, in formulating some conclusions concerning the position which trional occupies toward other hypnotics, especially toward morphine. Of course, these conclusions are restricted within narrow limits; for the wards of a military hospital, which are occupied for the most part by patients suffering from internal diseases, are deficient in the numerous interesting cases of functional exhaustion of the nervous system and in the various physical affections attended with excitement and sleeplessness, in which the use of an active and innocuous hypnotic so frequently contributes to recovery. Those of our patients who required the hypnotic were individuals suffering from painful affections accompanied by sleeplessness, and also, quite frequently, persons afflicted with fatal diseases whose sufferings demanded relief, if but for a few hours. Morphine has long been known as a comforter of these unfortunates, and, hitherto, has not been equaled by any other hypnotic, and if, therefore, in the following reports cases occur in which the much milder, although very serviceable, trional proved inefficient, these cannot militate against our favorable estimate of this remedy.

A few words with regard to its manner of employment. The doses varied from 0.5 to 2.0 gm., according to requirements. The

time of administration was always 9 P. M. Care was taken that the trional powder was always administered with a sufficient amount of fluid (soup, milk, wine). Attention was paid to the bowels, in consideration of the phenomena (diminution of the alkalinity of the blood, hematoporphyrinuria) which are observed after prolonged employment of its congener, sulfonal. It seems superfluous to adopt any special regulations of the diet. An abundant administration of citric acid in the form of the officinal potus acid citrici was ordered. Below we give short reports of the above-mentioned cases :

CASE I.—St. M., aged 24, recruit, suffering from incipient phthisis on both sides, was attacked by a left-sided pleurisy attended with rigor and high fever. The exudation increased quite rapidly, extending anteriorly to the clavicle and produced marked symptoms of compression. By puncture, 1 litre of pus, containing streptococci was evacuated. This was followed by a progressive loss of strength, recurring dyspnea and death after five days in collapse.

During the accumulation of the exudate, trional was administered for eight days in doses of 1.0 gm. for the relief of pains and sleeplessness. The effect was remarkably good; up to the time that the exudate reached its highest level the patient slept well until morning, and expressed his satisfaction with the medication.

CASE II.—V. G., aged 16 years, hereditary predisposition, was admitted to the hospital with pronounced chronic phthisis on both sides. After several months' treatment, which was unable to prevent extension of the process, the patient began to be sleepless. Trional, 1.0 gm., was administered. The effect was surprisingly marked; the patient not only slept the entire night, but until late in the morning; he also passed the following day in a drowsy condition, and the following night in deep sleep. For this reason the dose was reduced to 0.5 gm. During almost two months the effect was very satisfactory; the patient slept well and suffered from no after-effects. Not until the later stages of the disease, when the patient's vitality had become exhausted, was it found impossible to obtain the same favorable results.

CASE III.—A. K., aged 22, corporal, hereditarily predisposed, was admitted with commencing infiltration at the apices. Patient was much disturbed in his night's rest by cough, fever and night sweats and requested a hypnotic. During five days, doses of 1.0 gm. trional were administered, with the desired result, and patient passed his nights in quiet sleep. After the sixth dose its effect failed to occur and rest was only secured by internal administration of morphine. No further observations were made and patient returned to his home.

CASE IV.—J. L., aged 21, soldier; admitted with bilateral tuberculosis at the apices, and echinococcus of the liver. Patient decreased visibly in strength and a pleural exudation developed on the right side, with marked dyspnea and insomnia. As radical treatment seemed unavailable trional in doses of 1.0 gm. was employed with good success for three weeks, with alleviation of his sufferings. Patient obtained rest at night and frequently slept until late in the morning.

CASE V.—F. A., aged 22, soldier in the infantry, suffered from a severe diffuse febrile bronchitis, attended with violent cough, difficulty in breathing and sleeplessness. During the acme of the disease process trional 1.0 gm. was administered for five evenings. The result was satisfactory; patient had less cough and slept uninterruptedly for four to five hours.

CASE VI.—A. F., aged 29, watchman, was admitted to the hospital with the same symptoms as above. Trional was administered in 1.0 gm. doses for fourteen days and manifested equally favorable effects; the patient enjoyed sleep of five to six hours' duration and passed the remainder of the night in an equally good condition.

CASE VII.—J. W., aged 24, was admitted for the same disease. The restlessness and respiratory disturbances were especially marked; the percussion note was slightly dull over the lower lobe in consequence of accumulation of secretion. Here, also, trional, administered in 1.0 gm. doses for ten days, acted efficiently; patient slept uninterruptedly until three in the morning and sometimes later.

CASE VIII.—F. Sch., aged 24, soldier in infantry, was admitted with a severe phlegmonous angina. There were present high fever, difficulty in swallowing and severe pains radiating over the face and neck. As the latter persisted, after an incision had been made, trional was administered in 1.0 gm. doses for eight days. The effect was admirable and patient slept undisturbed until the morning hours.

CASE IX.—F. V., aged 24, corporal, also suffered from a phlegmonous angina of great severity. Here, also, the remedy was employed with excellent effect in 1.0 gm. doses for two nights.

CASE X.—F. D., aged 29, sergeant, afflicted with articular rheumatism, acquired, during his sojourn at the hospital, a tonsillar abscess on the left side; severe pains and sleeplessness were present during several days. Trional, 1.0 gm., was administered for two evenings, and produced a brief sleep of one to two hours' duration. On the third evening the dose was increased to 2.0 gm., and produced sufficient sleep, although, on the following morning, the patient was in a disagreeable drowsy condition, so that the double dose had to be discontinued.

CASE XI.—G. K., aged 22, soldier in infantry, was admitted with a typical pneumonia of the right lower lobe and marked diffuse bronchitis. During the stage of resolution, violent cough and sleeplessness occurred. As trional, 1.0 gm., proved inefficient, 2.0 gm. were administered, with a production of sleep from 9 P. M. to 2 A. M. The double dose, however, was badly borne, and the patient stated that he felt confused and suffered from violent headache and vertigo; for this reason, trional was discontinued.

CASE XII.—F. M., aged 23, soldier in infantry, was admitted with the symptoms of a violent gastro-enteritis attended with peritoneal irritation. Respiration was accelerated and superficial, and there was high fever, 30° to 40° C. Vomiting of material colored with bile, tympanites, marked tenderness of the abdomen and bloody diarrheal stools were present. As the patient was unable to sleep at night, trional in doses of 1.0 gm. was administered on six occasions, but without adequate effect, since the patient did not fall asleep until midnight. Under the other treatment his condition improved, so that the trional could be dispensed with.

CASE XIII.—R. Sch., aged 24, cannoneer, was admitted with metastatic sarcoma of both lungs. There were present hemoptysis, due to compression, especially of the right lung, severe dyspnea and insomnia. Trional was employed on ten occasions; doses of 0.5 gm. proved absolutely inefficient, and with larger doses, 1.0 to 2.0 gm., a brief sleep, of one to three hours' duration, could be obtained only twice. As alleviation of the distressing condition of the patient appeared urgently demanded, trional was replaced by the sovereign remedy, morphine.

CASE XIV.—Th. W., aged 22, had sustained a rupture of the left drum membrane, in consequence of a blow on the ear, which was followed by a purulent otitis media, despite the most careful treatment. A severe febrile condition rapidly developed, with terrible unilateral headaches and continued insomnia. The suppuration made its way through the inner ear to the brain membranes; facial paralysis with dimness of vision supervened, and soon the patient became delirious and later on unconscious, and succumbed in coma under marked febrile phenomena. For the relief of some of the symptoms, trional in doses of 1.0 gm. was employed without any effect, and the desired results could be obtained only by injections of morphine.

CASE XV.—F. B., non-commissioned officer, suffering from chronic tuberculosis of both lungs, was admitted to the hospital with all the symptoms of a severe perityphlitis, which was associated with violent peritoneal irritation, fever, extreme painfulness of the abdomen and insomnia. Patient was treated symptomatically with injections of morphine, but soon became habituated to it to such an extent that he was unable to

obtain any rest without it, and, when refused, repeatedly requested help from the inspecting physicians. The sleeplessness increased at a subsequent period, when a left-sided pleurisy, with marked exudation, violent lancinating pains and dyspnea made its appearance, and larger doses of morphine had to be resorted to. In place of this drug, trional was administered in doses of 1.5 gm. The effect was very variable. On several occasions the patient slept quite well, with few interruptions, but more frequently he passed disturbed and, for the most part, sleepless nights. After the patient had used sixteen doses, with an interval of three days, he became greatly constipated and manifested a decided repugnance towards trional, so that its continued administration appeared inadvisable, and, at the urgent request of the patient, recourse was again had to hypodermics of morphine. The autopsy showed, as a cause of the circumscribed peritonitis, a perforation of the vermiform appendage by a concretion of the size of a bean and yellowish brown color.

The observations on trional which have appeared up to the present time, and are given in detail in the work of Dr. Otto Bakofen, are derived, for the most part, from psychiatric clinics. The authors concur unanimously in regarding trional as an excellent sedative and hypnotic, and recommend its employment in the various forms of neurasthenia, psychoses attended with moderate excitement, and in organic affections of the brain. On the other hand, in the sleeplessness due to bodily pains, negative results have been frequently reported.

The above-mentioned series of observations, as will readily appear from what has been before said, relate exclusively to cases of the latter kind, and, notwithstanding this, the results in general must be considered satisfactory. In Cases I. to IX., which were attended with considerable somatic disturbances, the effect of the remedy was most admirable. A deep and undisturbed sleep, of about five to six hours' duration, ensued from a quarter to half an hour after its administration. There were no disagreeable sequelæ and the sleep resembled perfectly the normal. In Cases X. and XI., larger doses (2.0 gm.) were required for obtaining a hypnotic effect, and here the sequelæ mentioned by several authors were observed. A disagreeable feeling of drowsiness, headache, vertigo and a sensation of reeling were experienced, while nausea, vomiting and tinnitus were never observed. Aside from these comparatively slight disturbances of the general condition, no interference with the functions of vital organs occurred. In Cases XII. to XV., comprising patients severely ill, in which the employment of

trional, as would appear from previous reports, promised but little, the remedy proved ineffective. The patients slept little, or not at all, and morphine had to be resorted to.

Briefly formulated, the above series of experiments demonstrates that, in cases of insomnia due to moderate bodily disturbances, trional may be employed with advantage. If properly administered in proper doses, no disagreeable after-effects or sequelæ and no habituation will be observed. On the other hand, in severe cases it is utterly unable to replace morphine.

Clinical Report.

THE TREATMENT OF INTERMITTENT FEVER.

By WALTER M. FLEMING, M. D., New York.

BEFORE the discovery of the tubercle bacillus, many a cough was allowed to continue without treatment and the real difficulty not suspected until a sharp hemorrhage or a hectic fever revealed the true situation. Only a few months ago, diphtheria patients walked the streets with a simple sore throat, while cases of follicular tonsillitis were carefully treated as diphtheritic in character. Nearly all of us were taught that malaria was an earth-born poison which filled the air with "a fever-generating agent." Now all this is changed. The tubercle bacilli can be detected in the earliest stages of phthisis. The Klebs-Loefler bacillus decides the presence of diphtheria, and the malarial germs of Laveran tell us we have an intermittent fever.

It is natural that we look for a remedy which will destroy these germs or counteract their poisonous products. Indeed, it now appears that we have, unconsciously to be sure, been giving a perfect specific for the cause of the latter disease. Quinine is no longer administered in an empirical manner. We know precisely why we give it and what it does. Quinine exerts a deathly influence over the malarial germ; therefore, it may be given with the satisfaction of knowing that it will invariably check the paroxysms of an intermittent fever. If its use is not followed by this cure, then it is certain that it never came in contact with the red corpuscles of the blood. Absorption was incomplete or the quantity of the drug was insufficient. In the light of all this, it is certainly

bordering on the ludicrous that the National Dispensatory should give a list of seventy-six remedies in the index under intermittent fever.

The patient has usually had a malarial paroxysm before seeking medical advice. As hepatic activity is necessary to obtain the best effect of the specific treatment, so, in cases of constipation at least, it is better to begin the treatment with the following prescription, which should be taken five or six hours prior to the quinine :

℞—Hyrdarg. chloridi mite .....
Sodæ bicarb., aa..... gr. 1
M.—Divide into six powders.

Sig.—Take one powder every fifteen minutes, using all the powders.

This is far preferable to giving the calomel in one single dose and in larger quantity. However, it may be necessary, if the patient is insensitive to purgatives, to increase the quantity in the prescription by one-half. While this preparatory treatment is not necessary, yet it is certainly true that after its employment a less quantity of quinine is required and the general condition of the patient is improved.

It has been stated that this treatment should be given five or six hours before the specific treatment. It should now be said that the latter treatment is best inaugurated at such a time that it will be exerting its fullest physiological action when the next paroxysm is due. This time can be quite accurately stated when we remember that a paroxysm often begins an hour earlier than the preceding one, and that about three hours are required for the quinine to be in its most active condition in the body.

To insure prompt and complete absorption, the quinine is best given in liquid form. The following is a favorite prescription :

℞—Quinia sulph..... grs. xv.
Aquæ..... oz. j.
Acid sulph., dil., q. s. ft. sol.

Mx. *et.* Sig.—Take at one dose in one-third glass of water.

With the above preparatory treatment, and with the quinine dissolved, this dose is equivalent to at least twenty grains given after the usual manner; while it is certain we should not trust to pills or capsules at such a time unless we know positively that these are in a perfectly soluble condition.

To prevent the uncomfortable head symptoms which accom-

pany full doses of quinine, and also to relieve the pain which is likely to be present at the same time of the expected paroxysm, the following prescription should be given four or five hours after the specific:

℞—Antikamnia tablets (5 gr. each) No. xxiv. (24).
Sig.—One tablet every two hours while pain necessitates.

While the above dose of quinine is sufficiently large for residents of most parts of the United States, yet, in some of the Southern States, and in other sections where malaria abounds with unusual force, it may be necessary to give the quinine as high as twenty, forty, or even sixty grains. But in the great majority of cases the above single dose will be sufficient to prevent a second chill.

In order that there may be no question about the recurrence of an attack, and also in order to bring the system under the influence of a good tonic, the quinine should be continued for one or two weeks in doses of five to ten grains a day. As the malarial germ has left its effects on the nervous system, and often to a marked degree, so a remedy is indicated which will put at rest the disturbed condition. The following will be found satisfactory in every way:

℞—Antikamnia and quinine tablets, 5 gr. each. No. xxiv.
Sig.—One tablet three times a day, after meals.

This tablet contains 2½ grains sulphate quinine and 2½ grains antikamnia, being the most desirable proportion.

If the physician be called while the patient is suffering from a paroxysm, and he is in doubt as to its nature, he has only to remember that any intermittent fever which resists the action of quinine is not necessarily of malarial origin. Even during the chill of a malarial attack the temperature may rise to 102°, or higher, while it is often true that when the chill has passed and the fever is on, the thermometer will show a lower degree of heat. Therefore, no better treatment can be given at the beginning of, or during the chill, than the following:

℞—Antikamnia tablets, 5 gr. each. No. xxiv.
Sig.—Take two tablets immediately. Repeat dose in two hours if pain necessitates.

The antikamnia will relieve the congestion of the abdominal and thoracic organs and will materially alleviate the headache of the second stage especially. In fact, it practically robs the fever of its most distressing features.

When we consider that the cause of intermittent fever is so thoroughly understood and that quinine is regarded as its specific, destroying said cause, how puerile are all attempts to bring forward new substitutes. Although pain may not be dependent upon any special living organism, yet it is certain that in antikamnia we have a most reliable specific.

In regard to the treatment of all forms of febrile maladies, periodic or continued, I have found the antikamnia tablets with its various combinations of codeine, salol or quinine (as indicated in each individual case), the most reliable, prompt and satisfactory remedies in controlling these intractable disorders of any remedial agent known to me in a general active practice of over thirty years.

240 FIFTH AVENUE.

Progress in Medical Science.

OPHTHALMOLOGY.

BY ALVIN A. HUBBELL, M. D.,

Professor of ophthalmology and otology in the Medical Department of Niagara University.

EDEMATOUS OPTIC NEURITIS OF INTRACRANIAL ORIGIN.

DR. H. PARINAUD, of Paris, (*Annales d' Oculistique*, English edition, July, 1895,) after reviewing the several theories of the pathogenesis of optic neuritis, explains its production in the following manner: optic neuritis of intracranial origin is primarily a lymphatic edema of the nerve. This edema is produced by the same influences and the same mechanism as the edema in the cerebral substance, of which the optic nerve forms a sort of orbital prolongation. It is most frequently combined with hydrocephalus and the increase of intracranial tension which accompanies it, but it does not necessarily imply the existence of ventricular hydropsy. Furthermore, the excess of intracranial tension seems to be incapable alone of producing capillary edema.

Edema of the optic nerve does not imply a considerable excess of intracranial tension, or mechanical forcing back of the intracranial fluid into the nerve, any more than edema of the legs in cardiac or abdominal affections implies a strong elevation of venous tension, or forcing of serous fluid into the extremities.

The inter-vaginal infusion of the optic nerve is a concomitant phenomenon which has no relation of cause and effect with neuritis. The latter would occur quite as well if there were no inter-vaginal space.

The scleral ring favors the papillary strangulation produced by this edema in the same sense as a ligature on an edematous limb. On the other hand, the external seat of the optic nerve plays a protective rôle in relation to the nerve itself, in the same way as a compress bandage does on an edematous limb.

For these reasons he designates optic neuritis of intracranial origin by the name of edematous neuritis, which seems likely to be accepted.

FORMOL IN THE TREATMENT OF PURULENT OPHTHALMIA.

DR. FROMAGET, of Bordeaux, (*Annales d' Oculistique*, English edition, February, 1895,) writing of formol in the treatment of purulent ophthalmia, reports good results. He says that formol, the antiseptic qualities of which have been accurately established, and which was first recommended in ophthalmology by Valude, he has employed in two ways: as a collyrium in the proportion of 1 to 200, and as a wash, 1 to 2000. After carefully bathing the palpebral and bulbar conjunctiva with a solution of 1 to 2,000, several drops of the collyrium should be instilled four times a day.

Formol has already been used successfully in cases of catarrhal conjunctivitis, and has also been submitted to the new-born children from the obstetrical clinic of the Hospital St. André, of which ten cases are reported without accident or injury to the cornea. When used at a later stage the results were also favorable, and where corneal lesions already existed they did not increase, although nitrate of silver and sublimate irrigations had not retarded the progress of the disease. Can it be said that the use of nitrate of silver would not have produced as good results? But to acknowledge that the results produced by formol can be compared to those of the nitrate is to affirm at the same time the value of formol.

In one case, a young girl seventeen years of age attacked with purulent ophthalmia, and in which the disease was hardly twenty-four hours old, the results obtained by the use of formol were very satisfactory. It was not successful, however, in two cases of blennorrheic ophthalmia in adults. These two patients lost their sight from complete ulceration of the cornea with perforations. These

are the only two failures which he has to record. These last results are certainly not brilliant. But it is to be admitted that in spite of the most energetic treatment with nitrate of silver, eyes are not infrequently lost, and that speedily. The most serious purulent ophthalmias are those of blennorrheic origin observed in adults, while the majority of ophthalmias of the new-born are far more benign.

Formol is not altered by light, it does not rust instruments, it is antiseptic and presents but a single disadvantage, that of being painful in strong solution—for example, 1 to 200. But in proportion of 1 to 2000 it is well borne and produces no pain.

BISMUTH LORETINATE DRESSING IN THE TREATMENT OF EYE DISEASES.

In the treatment following operations on the eye, as well as in the treatment of traumatisms and various ocular affections, (phlyctenular, catarrhal, purulent and granular ophthalmia, diphtheria, tuberculosis, epithelioma and septic ulcers of the cornea,) Dr. W. Nicati, Marseilles, (*The Medical Week*, September 6, 1895,) has for some time successfully employed bismuth loretinate.

Dr. Nicati uses this substance both for "internal spraying" of the eye, in the same manner as calomel has long been applied, and for antiseptic dressing. The application of this dressing is described by Dr. Pietri in his thesis for graduation as follows: the patient opening his eye, powdered bismuth loretinate is sifted by means of a dry brush over the whole ocular region, including the eyebrows; then a strip of court plaster, about five centimeters in length by one in width, which has been dipped in an antiseptic solution, is applied vertically over the eye. Over this strip, an aseptic cotton-wool tampon is so arranged as to cover completely the orbital region.

The dressing is maintained by means of a bandage which may be renewed daily without inconvenience; it is even imperative to renew it whenever it has become displaced. Its therapeutical effect is most marked in cases of phlyctenular ophthalmia. Under the influence of the bismuth loretinate the pain and photophobia are said to promptly cease and rapid recovery follows. In cases of pustules, associated with ulcers, application of the dressing may be advantageously preceded by cauterisation of the diseased spots by the fine point of the galvano-cautery.

In ciliary blepharitis, Dr. Nicati obtains excellent results from applications of an ointment, prepared by mixing bismuth loretinate

with a sufficient quantity of olive oil, rubbed on the eyelashes with a small wad of cotton-wool. This ointment softens the crusts and causes them to readily fall, thus favoring a cure of the palpebral affection.

ON THE USE OF LARGE SUB-CONJUNCTIVAL INJECTIONS.

Dr. de Wecker, of Paris, (*Annales d' Oculistique*, English edition, June, 1895,) has returned to large sub-conjunctival injections and employs sublimate in solution of 1-2000. The therapeutic result has been so conclusive, as compared with that of weak injections, that doubt as to their rapid efficiency has not been tenable, either for him or for his pupils, who have carefully followed his work, and who have witnessed their surprising effects in a number of patients.

He ordinarily injects half a Pravaz syringeful, using the following formula:

Sublimate	0.015 gramme.
Salicylate of eserine	0.05 gramme.
Sterilised distilled water	30.00 grammes.

The myotic is only replaced by atropine or scopolamine when the case is complicated with iritis, and the combination of the sublimate solution with a myotic has seemed to produce a more favorable action than the simple sublimate solution.

The injections are first performed daily, during from one to three days after preparatory disinfection of the lashes with a 1 per cent. solution of oxycyanide of mercury and irrigation of the conjunctiva with a 4 per cent. boric acid solution. In antiseptic occlusion, bandage for the eye completes the treatment. The intervals for the injections and the amount of fluid injected are regulated according to the improvement. Even in very advanced cases of suppuration of the cornea with hypopyon, only six or eight injections are necessary to obtain recovery with clearing up of the diseased portions.

In using, exclusively, solutions of 1-2000 he claims to have never seen mortification of a portion of the conjunctiva, severe pains, or edema of one or the other lid, accidents described by his colleagues as "almost constant." Far from that, the injections have seemed to be scarcely painful, if the eye was well cocainised; they have an undoubted calming action. Patients with large ulcerations of the cornea have recovered sleep, of which they had

been deprived from the commencement of their disease, and almost all spoke of the great relief produced by the injections.

Occlusion of the eyes and large sub-conjunctival injections have been the only method of treatment employed in a large majority of destructive affections of the cornea, and, therefore, to them alone can the curative power be attributed. It is of slight importance whether this is due to antisepsis or to acceleration of lymph current in the cornea, or, finally, to the circulatory modifications which occur, all influences whose quantitative action it will never be possible to verify.

THE USE OF CONVEX GLASSES FOR DISTANT VISION IN MYOPIA.

DRS. L. DE WECKER and J. MASSELON (*Annales d'Oculistique*, English edition, February, 1895,) discuss the advantage gained in certain cases of myopia from the use of convex glasses for distant vision. They say that although this seems at first paradoxical, it is unquestionably true that myopes succeed in considerably increasing their sharpness of vision and are enabled to read characters at a distance which they could not distinguish with concave glasses, such, for example, as the name of a street or the number of a house, by placing in front of the better eye a convex glass, as they would use a lorgnette. The inconvenience of this procedure is in the fact that an inverted image is obtained; but with a little practice inverted characters are easily read, and the facts prove conclusively that this inconvenience is amply compensated for by the increased size of the image, since we know of myopic persons who make habitual use of such glasses.

The method of employing convex glasses in myopia consists in placing the glass before the eye at such a distance that its focus coincides with the punctum remotum. If the myope completely relaxes his accommodation, as he must do under other circumstances, he finds that with the aid of this convex glass the eye is adjusted for parallel rays and can see at a distance.

Practically, glasses weaker than 5 dioptries cannot be employed and it is desirable that they should be five or six centimeters in diameter. Under these conditions, the myope, with a little practice, can easily see the objects which he desires to observe, and the visual acuity will be found to be more than double that which is obtained by correcting the myopia with a concave glass, as we have recently had occasion to observe in a case of a person with myopia

of 20 dioptries who had accustomed himself to the use of a convex lens.

It would be advantageous to extend the use of convex glasses to many cases where, with a high degree of myopia, the visual acuity is defective. Glasses of about +6 dioptries should be prescribed and used like a magnifying glass for distant vision. Since these glasses produce an inverted image, they are to be used only occasionally, when the myope wishes to see with precision small objects, such, for example, as a public notice, the name of a street, or the number of a house. In these special instances convex lenses will be regarded by certain myopic persons as quite superior to concave lenses, and they will be thankfully accepted as a valuable expedient.

EYE-GLASSES.

Dr. Hansell, of Philadelphia, defends the use of eye-glasses as follows: "It will be admitted that spectacles are an unbecoming addition to anyone's face. However light, the screws in the lenses and the fastenings of the hooks as well as the hooks themselves are conspicuous and materially alter the wearer's expression. Eye-glasses are unquestionably more becoming. They are neater, more graceful, smaller and their means of support practically invisible. The advocates of the spectacle frame claim that it will not fall off, will maintain its position on the nose and, therefore, hold the lenses in their proper adjustment, is comfortable and durable and though in appearance objectionable is therapeutically to be preferred.

"On the other hand, I contend that the eye-glasses, the 'pince-nez,' offers decided advantages, and should be chosen by the large majority of those who must wear one or the other. The minority consists of those whose occupations demand severe bodily exertion, stooping position, or exposure to the weather, or who have deformities of the root of the nose.

"Spectacles indent the nose, cut the ears, are awkward to handle, are liable to be bent as they are being thrust into the case, and require constant attention and frequently the aid of the skilled mechanic to maintain accurate adjustment. The eye-glass is less conspicuous, is more convenient, particularly when far and near corrections must be worn, and will support a lens with precision equal to the spectacle frame, including cylinders and prisms, and, having a firm spring and no bars or long hooks, is far less likely

to become bent and the lenses out of their proper axes or centers. I, therefore, prescribe glasses whenever in my judgment the conditions are favorable."

STATE MEDICAL EXAMINATIONS.

CONDUCTED BY WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.,
Member New York State Medical Examining and Licensing Board.

UNIVERSITY OF THE STATE OF NEW YORK MEDICAL EXAMINATIONS.

EXAMINATIONS for license to practise medicine in this state will be held as follows:

Dates.—1896: January 28–31, April 7–10, May 19–22, June 16–19.

Places.—New York, Albany, Syracuse, Buffalo. Each candidate is notified as to exact place.

Daily Program.—Tuesday, morning, 9.15—12.15, anatomy; afternoon, 1.15—4.15, physiology and hygiene. Wednesday, morning, 9.15—12.15, chemistry; afternoon, 1.15—4.15, surgery. Thursday, morning, 9.15—12.15, obstetrics; afternoon, 1.15—4.15, pathology and diagnosis. Friday, morning, 9.15—12.15, therapeutics.

AN ANALYSIS OF THE WORK OF THE STATE MEDICAL EXAMINING AND LICENSING BOARD.

BY ALBERT T. LYTLE, M. D., Regent's examiner for Buffalo.

A MORE or less careful study of the percentages allowed by the examining board of the Medical Society of the State of New York, during the first three years of its existence, (academic years 1892, 1893 and 1894—the academic year begins August 1st and ends July 1st,) to candidates for license to practise medicine in this state, give some interesting facts that only too surely prove the wisdom of the step taken by the people and the advantages to be gained by a still greater demand upon those who wish to practise medicine in this great commonwealth. The high values of the following figures will, undoubtedly, be lowered as time passes, for, necessarily, the nature of the questions will call for more and more reasoning, deduction and comparison as the board gains experience and as the preliminary training of the applicants improves.

During the period just mentioned about one-third (33.99 per cent.) of all those who received the degree of Doctor of Medicine

from a regular college in good standing in this state contested the examinations set for them by the board. Of the total number of applicants, sixty-five plus per cent. were from New York state colleges, nineteen plus per cent. were from the colleges of the other states and fourteen plus per cent. were from the colleges of foreign countries, *i. e.*, Canada, Mexico, England, and the like. Ninety-two (92.73) per cent. of those of New York, eighty-eight (88.65) per cent. of those of the other states and ninety (90.15) per cent. of the foreigners were granted licenses—not at all a bad showing for this state's institutions.

According to law, a candidate who fails is entitled to another trial after an interval of six months, in which he is expected to review the work; also the number of examinations held yearly have been six, so that a candidate failing has been able to repeat at least once during the academic year. Now, the per cent. number of times that failures occurred as compared to the number of licenses granted was 10.71 for New York, 22.89 for the other states and 21.67 for the foreign countries, while the per cent. number of individuals failing, as compared with the number of licenses granted, was 9.35 for New York, 21.22 for the other states and 21.67 for the foreign countries. These figures seem to show that New York students had to repeat oftener than the other groups, or that when a candidate from one of the colleges out of New York state failed he sought to locate in fields easier of access, where the body-public was, probably, less sensitive as to qualifications. Every contestant who attains ninety per cent., or above, in six out of seven topics upon which questions are asked, receives an especial mark, called an "honor," which indicates a high degree of scholarship. This was granted to ten plus per cent. of the successful New York candidates, to fourteen plus per cent. of those from the other states and to less than two per cent. of those from foreign countries. As against foreign countries, New York makes a remarkable showing when is recalled the number of years of preparation demanded abroad, while comparison with other states is anything but flattering. Curiously, the highest individual average (99.7 per cent.) and the lowest that passed the board were both New York graduates. The general average per cent., for the whole period, for New York state candidates was 88.58 per cent., for those of the other states 90.44 per cent. and for those of foreign countries 88.39 per cent. In regard to the foreigners, allowance must be made for unfamiliarity with the English lan-

guage, otherwise the best-equipped are not immigrating. As for the other states, it is evident that only those who are above the average in scholarly qualifications are endeavoring to settle here; consequently they will be of great advantage, not only professionally, but also in educating the people to be satisfied with only the best that the colleges can turn out. Briefly, these figures show that New York is harvesting a fair average crop and is importing a probably excellent one from abroad and an undoubtedly superior one from the sister states. This alone more than endorses the action of the state in taking into her own hands the determining of the especial fitness of those desiring to prevent and cure disease.

A careful study of the percentages in the different topics invariably shows better results in the three junior branches (anatomy, physiology, chemistry,) rather than in the four senior and more (?) important branches (surgery, obstetrics, pathology and diagnosis, therapeutics, practice and materia medica). It would seem that time enough is not given to the senior subjects, or, what is more probable, the methods of teaching are at fault; while, possibly, the nature of the questions in the junior group are too simple, or, what is more likely, the examiner unconsciously makes an allowance for their apparent secondary position in the study and the practice of medicine. The fault with the method of teaching is not peculiar to the senior subjects; its effect is but felt in a greater degree because therein reasoning, and not memory, is so largely required. Teaching in the primary and in the secondary schools, from which medical colleges secure the majority of their students, has been, until within a few years, practically one of exercising the memory, while reasoning, comparison and association have been left to the later coming college or life experience. As a large number of the medical teachers have had no better early training than that outlined, it is to be expected that, notwithstanding they have obtained their positions by their ability to reason and apply, yet, when it comes to the art of teaching, they follow in the "footsteps of their illustrious forefathers."

The work of the medical examining boards, through the efficient and thoroughly up-to-date management of the University of the State of New York, will improve the present methods of technical teaching by first supplying the institutions with better equipped material with which to work; by, secondly, compelling the technical teachers to prepare that material so that it will be able to stand the scrutiny of modern broadminded critics; and by, thirdly, so care-

fully guarding the fairness of all contests that the student will fully appreciate the inestimable value of the diplomas granted and of the honors awarded, as well as the high scholarship necessary to obtain them, and he will, therefore, demand instruction of the very highest possible degree of perfection that he may relatively easily obtain the coveted prizes.

RECIPROCITY BETWEEN STATE BOARDS OF MEDICAL EXAMINERS.

WE BELIEVE the day is at hand (*Va. Med. Monthly*) when it is safe to advocate the laws of reciprocity between states having boards of examiners who adopt the same standard of requirements. This is a matter which, from the very nature of affairs, must very soon engage the serious attention of the profession. If the state laws require that all applicants for examination shall hold the diplomas of reputable medical colleges demanding a three or four years' course, as seems to be the tendency of the day, and if the law of the state in which the graduate may begin practice requires that he shall first be examined by the state board of medical examiners to test his qualifications, then it appears altogether reasonable that the licentiate of one state board may receive the certificate of another state board of equal demand as a sufficient test of qualifications to practise in that state. It looks a little hard for the young graduate who has already spent three or four years in preparing himself for his diploma, and who has since graduation satisfactorily stood before his state board, to be kept constantly preparing for examinations if he wishes to change his location from one state to another. It is not generally known that even between France and Germany there is a territory extending for fifteen miles on either side of the boundary line in which medical men who have the license of their nation may discharge their professional duties without molestation. "There is also an understanding between Quebec and Manitoba, so that the licenses granted by the boards of these respective provinces allow candidates to practise in either without further trouble." Quebec and New Brunswick had a similar understanding, but some irregularities occurred and they no longer reciprocate.

Then, also, there are cases in which the requirement of examination of thoroughly able practitioners—recognised as such everywhere they are known—may very seriously embarrass the interests

of a state. Thus, suppose a surgeon residing in another state—recognised the world over as an educated, competent, able one—were needed as professor of surgery in one or the other of Virginia's medical colleges? Whatever might be the inducement to accept, it is natural that he should be disposed to decline when he knows that he will, at his mature age and ripe experience as a surgeon, have to undertake again the study of the technicalities of chemistry, physiology and the like, in order that he may comply with the laws of the state in which he desired to go. Some law permitting reciprocity or the form of courtesy just intimated should be adopted in each state.

It is not necessary, nor do we advocate, that the statute of any state should compel its state board to adopt the certificate of another state board; but what is needed is a change in the laws which would *allow* a given state board to receive the certificate of another state board as sufficient evidence on the part of the lawful holder that he is qualified to practise without further examination.

PUBLIC HEALTH, HYGIENE AND BACTERIOLOGY.

Conducted by ERNEST WENDE, M. D.,
Health Commissioner of the City of Buffalo, N. Y.

SEPTEMBER, 1895, HEALTH RECORDS.

BY FRANKLIN C. GRAM, M. D., Registrar.

THE records show that there were 115 less deaths during this month than during the same month in 1894. This is an exceptionally great difference, and it is just as pertinent to ask what caused this great decrease as it would be to account for any sudden increase.

In the first place, the entire season has been a healthy one. Add to this the constant vigilance exercised by physicians, sanitarians, health authorities and the public at large, and we have a factor which must prove a very potent one and which is, at the same time, a powerful preventive against any epidemic.

A comparison with September, 1894, does not show a marked difference in any one class of diseases, but in all of them. They are herewith enumerated, the first figures being for 1894 and the second for 1895 respectively: Communicable diseases, 175, 136; development or decline, 13, 10; perverted or deficient nutrition, 62, 41;

diseases of the nervous system, 53, 43; circulatory system, 31, 21; respiratory system, 24, 24; digestive system, 76, 53; urinary system, 16, 15; generative system of the female, 6, 7; osseous and muscular system, 1, 1; violence, 18, 19. Total deaths for September, 1894, 485; total deaths for September, 1895, 370.

This makes a difference of 115 deaths less than in September, 1894, and 166 less deaths than in 1893.

The contagious diseases reported for 1894 and 1895, respectively, were: measles, 2, 1; scarlet fever, 58, 24; diphtheria, 32, 54; consumption, 43, not reported last year.

There was no very great difference in the births and marriages, they being 643 and 646 of the former, and 227 and 233 of the latter for 1894 and 1895 respectively.

It is a remarkable fact that the mean temperature for the month was identical for both years—namely, 65°; the mean barometer for 1894 was 29.34, and for 1895, 29.29; the total precipitation in 1894 was 5.59 inches, and 2.59 inches in 1895.

NURSING AS A PROFESSION.—Expend much time in earnest thought and weigh yourself and your capabilities before deciding to become a trained nurse. If you desire an easy profession select that of the washerwoman in preference. If you are a practical, business-like woman, and think of it as a profession which, when acquired, will yield you a good income in dollars and cents, and are willing to undergo two years of hospital service for the sake of acquiring it, and look at it from this standpoint only, you may possibly make a mechanical nurse. Your patients will not mourn your departure and you will never be called to visit the same household twice. If you are a romantic, novel-devouring maid, yearning to be known as a modern St. Elizabeth, and long to bathe weary brows and witness impossible death-bed scenes, and the like,—stay at home. You will remain at the hospital but a few days and you will be sadly disappointed. But if you are a strong, healthy woman, possessed of education, gentle breeding, a kind heart, determination, patience, and, above all, adaptability, and are willing to undertake whatever work is assigned you, and to face bravely whatever comes—if you are willing to forget your present station in life in order that you may become a useful woman and fit yourself for whatever fate the future holds in reserve for you, you will not regret the step you contemplate taking.– *From "The Training of a Nurse" in Demorest's Magazine for August.—Cleveland Med. Gazette.*

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

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WOMAN AND THE BICYCLE.

THE subject given in the above title appears to be an absorbing one just now. The daily prints are full of interesting accounts showing the progress of this new fashion, not to say fad, and each in turn is enjoying, day by day, its own little joke, original or stale, at the expense of the sex. Medical societies, too, are discussing the question as to the propriety of the exercise, both from a moral and physical standpoint, and medical journals are commenting upon the action of the societies as well as discussing it editorially. We have refrained until now from entering the field, preferring to await the crystallisation of the crude and imperfect elements that are evolving from all this material.

The time, however, seems to have arrived when we may express an opinion on the merits of the question with a reasonable degree of intelligence. The usefulness of the bicycle for business purposes is beyond question. For the young woman, engaged in business pursuits, whose residence is remote from the place of her occupation, it affords unquestionably the best and healthiest method of transit. In its use she avoids the street cars in the early morning, at midday and at evening, when they are overcrowded, unhealthful, uncomfortable, even dangerous. In its use she reaches her business office refreshed by a ride in the early morning air, better prepared to cope with her duties, and it carries her home to luncheon or dinner with an appetite stimulated to sharpness and a digestion correspondingly improved. This is one of the practical views of this many-sided question.

The bicycle considered as a means of recreation takes us altogether into another field. Here we are obliged to take into account

its moral and physical aspects. For a healthy woman whose social position is assured there is little to be said in criticism of her reasonable use of the wheel. Young girls, however, should be permitted to use it only under the strictest supervision of a competent parent or governess. The danger of its excessive use in youth is very great. No young girl should be permitted to ride to fatigue or to sit upon it otherwise than erect. Under no circumstances should she be permitted to ride at evening with the opposite sex unaccompanied by a proper chaperone. We have no doubt that a violation of this cardinal principle, that should be formulated as an inexorable rule, has been fruitful of much social mischief and would easily lead to ruinous consequences.

For the invalid, the question of the employment of the wheel becomes a problem of serious import. Physicians will constantly advise it on the broad ground of its furnishing healthful exercise in the open air, which, it must be confessed, is a strong argument, applicable to the needs of most semi-invalid women. Other physicians will condemn the use of the wheel *in toto*, on the narrow ground that no modest woman should permit herself to appear in public astride a bicycle; and especially should no woman out of health ride a wheel. The fact is, there are two sides to this question, as there are to most others, and the truth lies somewhere between these two extremes.

In prescribing the bicycle for an invalid, a physician should exercise the utmost caution and invoke his best judgment. Even then he must be prepared for disappointment. He must possess a perfect knowledge of a woman's physical condition; especially must he be familiar with the state of her pelvic and thoracic organs. It would be the idlest folly to direct a woman suffering from pus tubes to ride a bicycle in the expectation of benefit therefrom. It would be worse, even almost criminal, to recommend a woman with certain heart lesions to adopt the wheel as a cure. So, too, it may be said with reference to most pulmonic affections.

On the other hand, there are many disorders, or departures from the health line, that may be expected to derive undoubted benefit from a discreet use of the bicycle. Stout, plethoric, lithemic women, and all those whose sedentary habits tend to aggravate many neurotic affections, belong to this class. Some disorders of digestion, associated with chronic constipation, ought to derive benefit from this exercise. Since, however, it is our purpose to

generalise, and not to particularise, we may only hint in the lines of indication and contra-indication of treatment.

Finally, we approach the most difficult part of the problem to deal with—namely, that of dress. There are many points relating to the fashion of the bicycle costume that every woman will regulate according to her own fancy or caprice. Each will decide for herself whether she will adopt bloomers, wear knickerbockers or the short loaded skirt. Neither of these points pertains to matters of health, provided only the fabric is adapted to the climate and the season of the year. The professional rider will naturally adopt some form of bloomer, or, perhaps, tight-fitting trousers, with short coat. The element of safety must enter into her choice of a costume. The amateur rider, however, if she be a woman of social position, will, naturally, choose the short skirt reaching to the boot tops and properly loaded to resist air currents and to protect her in case she is dismounted. Knickerbockers are becoming to young girls and possess some conveniences for the tourist. Whatever costume is chosen, stout leggings, reaching to the knee, should always be worn. That portion of a woman's bicycle apparel with which it is our province as physicians especially to deal is the body underwear. Every rider should wear woolen next the skin, regulating the weight according to season, and, preferably, the union undergarments should be chosen. Woolen absorbs moisture and prevents or limits the danger of taking cold. Lastly, the corset should be discarded and a corded flexible waist substituted. The latter furnishes a good support for the clothing and avoids undue pressure on the pelvic organs. Stout women, or those with pendulous abdomens, may, with great propriety, wear a well-adjusted abdominal band or supporter.

Every woman should carry a good woolen coat, which may be strapped to the handle-bar when not needed. She should also wear stout, well-fitting boots, and we think good cloth undertrousers would be a sensible addition to her costume.

And this is about the sum and substance of the whole case.

TOPICS OF THE MONTH.

Mr. H. H. Littell, the optimistic manager of the street railway company, has been abroad. He comes home loaded with information, which he has unloaded to a reporter of the *Express*. After staying four months in Europe, Mr. Littell comes back with nothing

but admiration for his own system, which we are constrained to affirm is about the worst in any large city in the Union. Mr. Littell, if he is quoted correctly, affirms that he found but two improvements, while he was abroad, over the Buffalo system, and these were patience and forbearance on the part of the general public.

Every American who knows anything of foreigners is aware that an Englishman is anything but patient and forbearing if he does not get the seat in a tramcar or omnibus that he pays for. In Europe everybody is provided with a seat. In Buffalo this is exceptional. Mr. Littell had better go again and see if he cannot learn something new that is at least truthful to tell us. If, as reported, he owns a controlling interest in the Buffalo street railway system, he had better make haste to remedy the scandalous overcrowding of street cars that is witnessed daily on our streets. Besides the discomfort growing out of this faulty management it is very unhealthful, and on this ground we shall have occasion to challenge the faults of Mr. Littell's system in future unless they are corrected. Physicians are deeply interested in this subject on sanitary grounds, and it furnishes a wholesome theme for discussion in our medical societies.

In compliance with repeated requests, the regents have opened an office in New York City for the accommodation of the immense amount of business connected with the university that comes from the metropolis.

Mr. Asa O. Gallup, formerly chief clerk in the regent's office at Albany, has been appointed to take charge of the New York office. He will have all publications, blanks and necessary records for the accommodation of law, medical, dental and veterinary students, and for all the professional, academic and higher examinations conducted by the university.

The New York office is located at 10 East 42d street, and will be found open during the school week from 9 A. M. to 4 P. M. and 7 to 9 P. M. Business hours will be from 9 A. M. to 12 M., but the deputy will see all callers at other hours if they cannot come between 9 A. M. and 12 M.

Mr. Charles R. Skinner, superintendent of public instruction (*Buffalo Express*), has begun a campaign for the repeal of that absurd law requiring that pupils in the public schools shall be taught, for at least ten weeks in every school year, the effect of alcohol and narcotics on

the human body. Here's more power to his elbow. The instruction which is implied by the law is all right. The method of the instruction and the presumed purpose of the law are all wrong.

This subject will be found fully set forth in its proper light in Dr. Hopkins's article published in this issue of the JOURNAL.

THE people's baths of the New York Association for Improving the Condition of the Poor, at No. 9 Centre Market Place, are becoming more popular every year. The total number of baths taken since the opening, on August 17, 1891, is 307,844. Much encouragement is derived by the society in the prosecution of its work from the fact that the number of baths taken last year was 88,734, an advance of 8,197 over the number taken the year before. The volume of business has been immense, in view of the small number of bathtubs at the establishment.

Personal.

MEDICAL Director Albert Leary Gihon, United States Navy, the senior officer of the medical corps of the navy, who received retirement orders September 28, 1895, is one of the most eminent men of his profession in the navy. He has a fine service record of forty years and leaves the navy under the age-retiring law. He received his degree of A. B. at the age of seventeen, M. D. two years later, and at the age of twenty-one was professor of chemistry and toxicology in the Philadelphia College of Medicine and Surgery. He has served in all parts of the world in the navy and has received decorations and thanks from several foreign countries for services rendered.

He is the author of numerous papers and addresses on naval hygiene, public health, sanitary reform, state medicine, higher medical education, vital statistics, medical demography and climatology, and has contributed to literary magazines and other periodicals articles on medical and surgical subjects. One of his latest contributions to medical science was alluded to in the review of the Twentieth Century Practice in the September issue of this journal, page 195.

Dr. Gihon is originator of the project to erect a monument at Washington to Dr. Benjamin Rush. Dr. Gihon is in unimpaired

physical and mental vigor, a fact that promises continued usefulness as one of the foremost medical men of the century. He retires with the rank of commodore, U. S. Navy, which corresponds to that of brigadier-general in the army.

Dr. Dewitt G. Wilcox, of 568 Delaware avenue, Buffalo, announces his retirement from general practice to devote himself exclusively to surgery, including surgical gynecology. His relations to the Lexington Heights Hospital will continue as heretofore.

Dr. J. L. Eddy, of Olean, was elected president of the Erie Railway Surgeons' Association at the annual meeting held in Buffalo, October 1, 1895. Dr. Eddy is one of the well-known surgeons of the Southern tier.

Dr. Ernest L. Ruffner, whose term of service as one of the resident staff of the Buffalo General Hospital terminated May 1, 1895, has become associated with Dr. Floyd S. Crego, 469 Delaware avenue.

Dr. C. R. Holmes, of Cincinnati, announces his removal to his new offices and private hospital at Nos. 8 and 10 East Eighth street, where only ophthalmic, aural and rhinological cases will be admitted.

Obituary.

LOUIS PASTEUR.—1822–1895.

If there were two opinions as to the merit of the work of Pasteur living, there is but one judgment of Pasteur dead—namely, that his memory will ever be cherished as one of the greatest men of his time.

Louis Pasteur was born at Dole, France, December 27, 1822, and died at Garches, near St. Cloud, in the environs of Paris, September 28, 1895. The immediate cause of his death was paralysis, which increased in severity during the last days of his life, culminating in a severe stroke the day before his death, after which he remained comatose until the end. Pasteur early developed a love for the study of chemistry, and entering the Ecole Normale at Paris he followed up his researches in this line of work. After-

ward, at Sorbonne, he further pursued this study under the tuition of M. Dumas, whom he succeeded at the French Academy in 1882. Pasteur's first great work was accomplished in 1865–66, when he was called upon to investigate the silkworm plague that was destroying one of the greatest of French industries. He discovered that the cause of the plague was a parasite and that it could be arrested by destroying all the worms and eggs that were affected. He met the ridicule that this statement provoked, when he was told that the pest would still be propagated by spontaneous generation, by denying that there was any such thing and he proved the truth of his theories by checking the plague after the manner described.

The phenomenon of fermentation next attracted his attention. He alleged that it was caused by microörganisms and claimed that if all germs could be excluded fermentation would be impossible. He was again opposed by the same bigotry, but he demonstrated the truth of his propositions by showing that, at an altitude where the air was free from germs, no fermentation did or could occur.

Pasteur next began to investigate the diseases of men and animals, arguing that the contagious and infectious diseases were probably caused and sustained by the action of living organisms similar to the plague of the silkworm. It is well known to the profession of medicine that he soon sustained his theory and through his researches a large number of diseases have been brought under control.

Of late years Pasteur has turned his attention toward the cure of hydrophobia. While opinion has been and is yet divided as to the merits of his cure, there is yet an ever-increasing belief in its efficacy. Pasteur is entitled to the appellation of father of the germ theory of disease. Under the stimulus of his researches, diphtheria, cholera and hydrophobia are being stripped of their terrors, and it is believed that consumption will soon be under control.

In the following synopsis the principal events of Pasteur's life are given in chronological order: 1840, entered the university; 1843, pupil at the Ecole Normale; 1847, received the doctorate; 1848, professor of physics at Strasburg; 1854, dean of the faculty of sciences at Lille; 1857, assumed scientific direction of the Ecole Normale; 1863, professor of geology, physics and chemistry at the Ecole des Beaux-Arts; same year elected a member of the institute; 1856, awarded Rumford medal by the Royal Society of

By courtesy of the Scientific American.

LOUIS PASTEUR.

London; 1853, decorated with the Legion of Honor, promoted officer in 1863, commander in 1868; 1869, elected one of fifty foreign members of the Royal Society of London; 1874, granted a life annuity of 12,000 francs by the National Assembly for investigations on fermentation; 1878, grand officer of the Legion of Honor; 1882, admitted into the French Academy. On December 27, 1892, Pasteur's seventieth birthday was celebrated before a representative official assembly at Sorbonne. A mural tablet has been erected to his memory at the Ecole Normale and he recently declined a decoration tendered him by Emperor William III.

The work of Pasteur has been of a nature, whether judged by its present achievements or prospective results, to rank him as one of the greatest products of the nineteenth century and his memory will remain immortal in the realms of science. We present herewith an admirable portrait of Pasteur by permission of the *Scientific American* and we have obtained much data for this sketch from that paper of October 12, 1895.

Dr. Abby Janet Seymour, the most prominent woman homeopathic physician in Buffalo, was killed by a railway train on the New York Central tracks, near the water works station, Thursday evening, October 17, 1895. It is supposed that she was struck by a train and instantly killed, but just how the accident occurred no one can tell, as there were no witnesses to it. Dr. Seymour had been in poor health for some time and was about forty-two years old at the time of her death. She was the daughter of the late Erastus Seymour, formerly one of Buffalo's leading citizens. She was educated at Mrs. Reed's school in New York and had lately taken a post-graduate medical course at Chicago. Dr. Seymour was an artist of considerable note and was a woman of diversified talent. Her loss will be deeply felt by a large circle of friends.

Society Meetings.

The American Association of Obstetricians and Gynecologists held one of its most interesting and satisfactory meetings at Chicago, September 24, 25 and 26, 1895. The attendance of members was large. Numerous papers were read relating to obstetrics, gynecology and abdominal surgery, and the discussions, as usual in this association, were spirited, forceful and instructive.

The president, Dr. J. Henry Carstens, of Detroit, administered the affairs of the association with great discretion, facilitating the transaction of the large amount of business before it with thoroughness and despatch.

The following-named were elected officers for the ensuing year: president, Dr. Joseph Price, of Philadelphia; vice-presidents, Drs. Albert Hawes Cordier, of Kansas City, and George Sherman Peck, of Youngstown, Ohio; secretary, Dr. William Warren Potter, of Buffalo; treasurer, Dr. Xavier Oswald Werder, of Pittsburg; executive council, Drs. Charles A. L. Reed, of Cincinnati; James F. W. Ross, of Toronto; Albert Vander Veer, of Albany; Lewis S. McMurtry, of Louisville; and J. Henry Carstens, of Detroit. Seventeen new Fellows were also elected.

The ninth annual meeting was appointed to be held in Richmond, Va., Tuesday, Wednesday and Thursday, September, 15, 16 and 17, 1896. Resolutions of thanks were passed as follows: first, to Dr. J. B. Murphy, chairman of the committee of arrangements, for the efficient manner in which he had provided for the comfort of the Fellows during the meeting and for the delightful yacht sail tendered the Fellows and guests of the association; second, to the Chicago Gynecological Society, for many courtesies tendered; and, third, to Messrs. Breslin and Southgate, proprietors of the Auditorium hotel, for the free use of a splendid parlor in which the meeting was held, and for courteous attention to the Fellows who were guests in the house.

The ninetieth annual meeting of the medical society of the state of New York will be held at Albany, Tuesday, Wednesday and Thursday, January 28, 29 and 30, 1896.

The president, Dr. Roswell Park, of Buffalo, announces the following business committee: Dr. H. R. Hopkins, of Buffalo, chairman; Dr. Nathan Jacobson, of Syracuse, and Dr. J. M. Winfield, of Brooklyn. The president requests that members desiring to present papers may promptly notify the chairman of this committee. He also announces that addresses have been promised by Dr. William Pepper, of Philadelphia, and President Eliot, of Harvard University. The latter will speak on the subject of medical education of the future.

The Southern Surgical and Gynecological Association will hold its eighth annual meeting at Washington, D. C., November 12, 13

and 14, 1895. The efficient permanent secretary, Dr. W. E. B. Davis, of Birmingham, has prepared a program replete with interesting titles by able authors, which bespeaks an instructive meeting. The following-named are the officers elected for this meeting: president, Dr. Louis McLane Tiffany, Baltimore; vice-president, Dr. Ernest S. Lewis, of New Orleans, and Dr. Manning Simons, of Charleston; treasurer, Dr. Richard Douglas, of Nashville; member of Council for five years, Dr. L. S. McMurtry, of Louisville.

THE Medico-Legal Society of Jersey City, recently organized, has appointed a committee to secure a building suitable for a club-house and large enough to accommodate all the doctors and lawyers in Hudson county. It is probable that a building fronting Van Nest Park will be chosen. An effort will be made by the society to secure the Jersey City law library for the lawyers and the extensive medical library of the late Dr. Beriah A. Watson for the society.

THE American Public Health Association held a very interesting meeting at Denver recently. Dr. Ernest Wende, health commissioner of Buffalo, was in attendance as a delegate and secured the next meeting for Buffalo. It will undoubtedly be held early in October, 1896, and will be one of the most important meetings of the year.

THE Medical Association of Central New York held its twenty-eighth annual meeting at Syracuse, on Tuesday, October 15, 1895, under the presidency of Dr. Floyd S. Crego, of Buffalo, with 125 members present. The proceedings and all the papers read will be published in the JOURNAL, beginning with the December issue.

THE Cleveland Medical Society held a meeting during the afternoon and evening of September 27, 1895, at which were considered sanitary subjects pertaining to the city of Cleveland. The JOURNAL acknowledges an invitation to attend and regrets that it was unable to accept.

THE Detroit Medical and Library Association held its annual meeting Monday evening, October 7, 1895. A reception to the members of the association was held at the close of the meeting by the president, Dr. Eugene Smith.

Book Reviews.

PRACTICAL DIETETICS WITH SPECIAL REFERENCE TO DIET IN DISEASE. By W. GILMAN THOMPSON, M. D., Professor of Materia Medica, Therapeutics and Clinical Medicine in the University of the City of New York; Visiting Physician to the Presbyterian and Bellevue Hospitals, New York. Large 8vo, 800 pages Illustrated. Prices, cloth, $5.00; sheep, $6.00. Sold by subscription only. New York: D. Appleton & Co., Publishers, 72 Fifth avenue. 1895.

It is quite true, as asserted by the author of this comprehensive treatise in his introduction, that the subject of the dietetic treatment of disease has not received the attention in medical literature that it deserves. It is equally true that the medical schools have given it inadequate place in their curricula. This work of Thompson will do much to correct both of these evils, and it is hoped that it will stimulate an improvement in the training of nurses in regard to the preparation of food and dietetics, as well as to develop in the hospitals a better order of things in the diet kitchen.

No one is more competent to handle this subject than Gilman Thompson, and it goes without saying that he has done so in an exhaustive manner. The work is as large as most of those on the the theory and practice of medicine thirty years ago, and they sought to cover the whole field of treatment, including dietary management. Thompson begins with the elementary composition of foods and progresses through the entire range of their usefulness and application until he reaches their adaptability to disease. He becomes particularly interesting in the discussion of diseases especially influenced by diet. He does not forget to devote considerable space to the consideration of dietetics in public institutions, and the preparation of food for infants is given adequate place in the book.

It is a work that aims to occupy a field heretofore but little cultivated, and gives evidence of great care in its preparation. It will easily find its way into the library of every thoughtful physician.

SKIASCOPY AND ITS GENERAL APPLICATION TO THE STUDY OF REFRACTION. By EDWARD JACKSON, A. M., M. D., Professor of Diseases of the Eye in the Philadelphia Polyclinic and College for Graduates in Medicine; Surgeon to the Wills Eye Hospital; Chairman of the Section of Ophthalmology of the American Medical Association; Member of the American Ophthalmological Society, etc. Twenty-six illustrations; 8vo, pp. 112. Price, $1.00. Philadelphia: The Edwards & Docker Co. 1895.

Of all objective tests for errors of refraction of the eye, the shadow test, or skiascopy, is the most certain in its results, its application the most extended and its practice the most easily acquired. Dr. Jackson, with that conscientiousness and care

which characterises all he does, has here given the best exposition of the subject that has yet been presented. The following synopsis will enable the reader to judge as to the contents of the book: Chapter I., history, name, difficulties and how to study the test; Chapter II., general optical principles, reversal, real and apparent movement of light, rapidity of movement, form and brilliancy of light area, the point of reversal; Chapter III., conditions of accuracy, source of light, focussing on retina, positions of accuracy, irregularities in media or surfaces; Chapter IV., regular astigmatism, points of reversal, band-like appearance, changes with distance, direction of band and movements; Chapter V., aberration and irregular astigmatism, the visual zone, symmetrical aberration, positive and negative, irregular astigmatism, conical cornea, the scissors movement; Chapter VI., practical application with plane mirror, position and arrangement of light, H., E., M., regular astigmatism, aberration and irregular astigmatism, measurement of accommodation; Chapter VII., practical application with concave mirror, position and arrangement of light, H., E., M., regular astigmatism, aberration and irregular astigmatism, measurement of accommodation; Chapter VIII., general considerations, apparatus, mydriatics, relative advantages of plane and concave mirrors.

We heartily commend this little treatise to all ophthalmic practitioners, and trust that it will be instrumental in extending the use of this means of diagnosis, which to us has been invaluable for many years. The shadow-test should be resorted to more frequently than it is, and the instructions given by Dr. Jackson will enable any careful oculist to practise it intelligently and with satisfaction. A. A. H.

THE SCIENCE AND ART OF OBSTETRICS. By THEOPHILUS PARVIN, M. D., LL. D., Professor of Obstetrics and the Diseases of Women and Children in Jefferson Medical College, Philadelphia. New (third) edition. In one 8vo volume of 677 pages, with 267 engravings and two colored plates. Cloth, $4.25; leather, $5.25. Philadelphia: Lea Brothers & Co., Publishers. 1895.

Two previous editions of this work have received extended notices in this journal principally of commendation, hence it will be necessary now only to refer to such changes as the author has made in this edition. These are somewhat briefly stated in the preface to be, first, changes in the order in which the subjects are discussed; second, nearly one-third of the book has been rewritten and, third, additional illustrations have been introduced.

Parvin is a teacher of experience and great literary accomplishment. It is easy to understand, therefore, that his treatise is a popular one. With the principal part of the work there can be no criticism. We are, however, somewhat surprised at the author's position in regard to puerperal fever. Why he has not at once adopted the term puerperal sepsis and discussed the disease from the standpoint that such a name would indicate, we are at a loss to

understand. However, much of his pathology is correct and consequently his treatment in the main is satisfactory. We think it would have been well to have discussed phlegmasia alba dolens under the head of puerperal septic phlebitis, a name suggestive of its true pathology and indicating an appropriate line of treatment.

The book as usual is well printed and profusely illustrated. It aims to meet the requirements of both student and obstetrician.

THE HISTORY OF PROSTITUTION : Its Extent, Causes and Effects throughout the World. By WILLIAM W. SANGER, M. D., Resident Physician, Blackwell's Island, N. Y. Octavo, pp. 709. Price, cloth, $4.00; leather, $5.00. New York: The American Medical Press, 816 Broadway. 1895.

The subject of this work is not a savory one, yet it is dealt with by the author in a delicate though forceful manner. The solution of the problem has for ages occupied the attention of physicians, humanitarians and legislators. To these we commend a careful study of the work.

The author devoted about seven years to the preparation of the book, basing his observations upon investigations made both in this country and Europe. This is not a book that demands a critical review, but, nevertheless, it merits a patient reading by every person interested in the investigation of the subject. It is one of the most complete works ever issued, and has been brought down to the immediate present through thorough revision. Among those who have contributed to the appendix we notice the names of Drs. F. R. Sturgis, Prince A. Morrow and R. W. Taylor,—names that guarantee the scientific nature of the treatise.

A MANUAL OF ORGANIC MATERIA MEDICA; Being a Guide to Materia Medica of the Vegetable and Animal Kingdoms. For the use of Students, Druggists, Pharmacists and Physicians. By JOHN M. MAISCH, Ph. D., Professor of Materia Medica and Botany in the Philadelphia College of Pharmacy. New (sixth) edition, thoroughly revised, by Henry C. C. Maisch, Ph. G. In one 12mo volume of 509 pages, with 285 engravings. Cloth, $3.00. Philadelphia: Lea Brothers & Co., Publishers. 1895.

This celebrated work has heretofore obtained professional favor on both sides of the Atlantic ocean. Five editions of the book were issued during the lifetime of the author. This, the sixth edition, has been edited and revised by his son with a commendable desire to keep green the memory of his illustrious father. We believe that he has succeeded in the aim that he modestly states to be to make this work still worthy of the favor that previous editions have enjoyed.

The fifth edition was issued in the autumn of 1892, just previous to the publication of the pharmacopeia of the United States. To make it correspond with the names officially recog-

nised in the new pharmacopeia, the necessary additions and alterations have been instituted and several new illustrations have been added. In its present form the book shows abundant evidence of having kept pace with the progress of the subject with which it deals.

INDEX-CATALOGUE OF THE LIBRARY OF THE SURGEON-GENERAL'S OFFICE. United States Army. Authors and Subjects. Together with an Alphabetical List of Abbreviations of Titles employed in the Index-Catalogue. Volume XVI. W—Z Y T H U S. Washington: Government Printing Office. 1895.

This volume, the final one of the first series, includes 12,579 author-titles, representing 4,857 volumes and 11,613 pamphlets. It also contains 8,312 subject-titles of separate books and pamphlets and 13,280 titles of articles and periodicals. The entire series, sixteen volumes, 176,364 author-titles, representing 85,663 volumes and 151,504 pamphlets. They also contain 168,557 subject-titles of separate books and pamphlets, 511,112 journal articles and 4,335 portraits.

The editor announces that the manuscript of a second series including all the titles of books and articles received too late for the first series has been prepared and will, probably, make five printed volumes of the same size as those constituting the first series.

The foregoing statement indicates the great labor performed in the preparation of this catalogue, which ought to command the grateful appreciation of physicians all over the world.

THE URINE IN HEALTH AND DISEASE AND URINARY ANALYSIS, Physiologically and Pathologically Considered. By D. CAMPBELL BLACK, M. D., L. R. C. S., Professor of Physiology, Anderson College Medical School. In one 12mo volume of 256 pages, with seventy-three engravings. Cloth, $2.75. Philadelphia: Lea Brothers & Co., Publishers. 1895.

The importance of a thorough understanding of the part played by the kidney in the economy as an eliminator of waste products cannot be overestimated. The urine must be interpreted intelligently, else many of the phenomena of disease will be lost sight of. This little treatise cannot fail to aid the student in a better understanding of the subject. It is also a valuable book for the practising physician to consult in his urinary investigations. The physiological chemist, too, will find it of great value. It is concise and practical in its treatment of the subject.

THE JOHNS HOPKINS HOSPITAL REPORTS. Report in Gynecology. III., Volume IV., Number 7-8. Baltimore: The Johns Hopkins Press. 1895.

The excellent character of some of the work done at the Johns Hopkins medical school and hospital is testified to in this report,

which appears to be an honest setting forth of cases that the author himself has seen and faithfully recorded. They cannot fail to interest every gynecologist. The pamphlet is illustrated by a number of fine lithographs executed in Leipzig. There are also two fine micro-photographs well illustrating tuberculosis of the endometrium.

BOOKS RECEIVED.

Medical Diagnosis with Special Reference to Practical Medicine. A Guide to the Knowledge and Discrimination of Diseases. By J. M. DaCosta, M. D., LL. D., President of the College of Physicians of Philadelphia; Emeritus Professor of Practice of Medicine and of Clinical Medicine at the Jefferson Medical College, Philadelphia; Physician to the Pennsylvania Hospital, etc. Octavo, pp. 1104. Illustrated with engravings on wood. Eighth edition, revised. Philadelphia: J. B. Lippincott Company. 1895.

Cutaneous Medicine. A Systematic Treatise on the Diseases of the Skin. By Louis A. Duhring, M. D., Professor of Diseases of the Skin in the University of Pennsylvania, etc. Octavo, pp. vii.—221. Illustrated. Philadelphia: J. B. Lippincott Company. 1895.

Transactions of the Association of American Physicians. Tenth session, held at Washington, D. C., May 30 and 31, 1895. Philadelphia: Wm. J. Dornan, Printer. 1895.

The Pathology and Surgical Treatment of Tumors. By N. Senn, M. D., Ph. D., LL. D., Professor of Practice of Surgery and Clinical Surgery, Rush Medical College; Professor of Surgery, Chicago Polyclinic; Attending Surgeon to Presbyterian Hospital; Surgeon-in-Chief, St. Joseph's Hospital, Chicago. Octavo, pp. 709. Illustrated by 515 engravings, including full-page colored plates. Price, cloth, $6.00; half-morocco, $7.00. Philadelphia: W. B. Saunders, 925 Walnut street. 1895.

A Treatise on Nervous and Mental Diseases. By Landon Carter Gray, M. D., Professor of Diseases of the Mind and Nervous System in the New York Polyclinic. New (2d) edition. In one very handsome octavo volume of 728 pages, with 172 engravings and three colored plates. Cloth, $4.75; leather, $5.75. Philadelphia: Lea Brothers & Co., Publishers. 1895.

A Hand-Book of Medical Diagnosis. By James B. Herrick, M. D., Adjunct Professor of Medicine, Rush Medical College, Chicago. In one handsome 12mo volume of 429 pages, with eighty engravings and two colored plates. Cloth, $2.50. Philadelphia: Lea Brothers & Co., Publishers. 1895.

The Pathology and Treatment of Venereal Diseases. By Robert W. Taylor, A. M., M. D., Clinical Professor of Venereal Diseases in the College of Physicians and Surgeons, New York. In one very handsome octavo volume of 1002 pages, with 230 engravings and seven colored plates. Cloth, $5.50; leather, $6.50. Philadelphia: Lea Brothers & Co., Publishers. 1895.

A Text-Book of Practical Medicine. Designed for the use of Students and Practitioners of Medicine. By Alfred L. Loomis, M. D., LL. D., Professor of Pathology and Practical Medicine in the Medical

Department of the University of the City of New York; Visiting Physician to Bellevue Hospital, etc. Revised and enlarged, with 207 illustrations and one chromo-lithographic plate. Eleventh edition. 1134 pages. Price, cloth, $6.00; leather, $7. New York: William Wood & Co. 1895.

Text-Book of Physiology. By Michael Foster, M. D., F. R. S., Prelector in Physiology and Fellow of Trinity College, Cambridge, Eng. New (sixth) American edition with notes and additions. In one handsome octavo volume of 922 pages, with 257 illustrations. Cloth, $4.50; leather, $5.50. Philadelphia: Lea Brothers & Co., Publishers. 1895.

Modern Materia Medica with Therapeutic Notes. For the use of Practitioners and Students of Medicine. By Dr. Otto Roth. Seventh edition. Revised by Dr. Gregor Smith, Würzburg. One volume of 467 pages, octavo, muslin binding. Price, $2.00. New York: William Wood & Co. 1895.

Miscellany.

CRAIG COLONY FOR EPILEPTICS.

THE object of a colony for epileptics is to provide for the four great needs of these unfortunates: first, to give them schools where they may be educated as other children and young people are; second, to afford them industrial training in any sort of occupation they may desire to follow; third, to provide those epileptics a home to whom all other doors are closed; fourth, to treat every case of epilepsy according to the best known scientific methods.

The need for provision of this kind is apparent, when we consider that there are 120,000 epileptics in the United States. There are some 12,000 in the state of New York, of whom more than 1,000 are in almshouses and asylums on public charge.

THE SITUATION OF CRAIG COLONY.

Craig colony, named for the late Oscar Craig, of Rochester, formerly president of the State Board of Charities, consists of nearly 1,900 acres of land in the Genesee Valley. It is reached by two trunk lines of railways (the Erie and the Delaware & Lackawanna) and from roads centering at Rochester by the Western New York & Pennsylvania railroad. The colony has its own post-office and railway station known as Sonyea (Livingston Co.), an Indian word signifying sunny place.

THE PLAN OF THE COLONY.

The law establishing the colony required that it should be arranged on the village plan. To this end the services of Fred-

erick Law Olmstead, the landscape architect, were secured by the board of managers and he has prepared the scheme of an industrial and agricultural village upon the best principles. There are already many buildings upon the grounds (some thirty or forty) which are to be immediately utilised. Craig colony will not resemble an institution in any particular, but will look more like a country town than anything else. As the patients are received, they will be set to work or at study in various ways. They will take care of the farms, gardens and orchards; they will plan and build new houses. There will be among them, tailors, shoemakers, printers, bookbinders, masons, ironworkers, carpenters, painters and so on. In fact, every sort of employment, every sort of recreation, everything in short that goes to make up the life of a country village will be found in this colony, the only difference being that the citizens of this community will be epileptics.

OPENING OF THE COLONY.

Work has been progressing very rapidly during the year to prepare existing buildings for the reception of patients. The first quota of patients, numbering sixty, will be taken from the almshouses early in November. It is proposed to receive 200 during the winter and perhaps more. Estimating the capacity of the present buildings at 300, additional buildings will be needed during the coming year to accommodate 300 more patients, before the 600 now in the almshouses can be cared for.

STATE PATIENTS.

The patients taken from the almshouses and asylums will be known as state patients, and they will be provided for before any private patients can be received. They will be sent to the colony by the poor authorities of each county according to a form required by law, the blanks for which will be furnished on application to the State Board of Charities or the superintendent of the colony.

PRIVATE PATIENTS.

As soon as all epileptics now upon public charge eligible for admission to the colony are provided for, private patients will be received at prices to be regulated by the board of managers, according to the kind and extent of care and attention required. Such patients may, if it be desired, erect cottages for their own use upon the grounds, upon application to the board of managers.

RESTRICTIONS AS TO THE KIND OF CASES RECEIVED.

There will be no restriction as to the age of patients admitted, and the only restriction practically applies to the mental condition. Insane epileptics, or epileptics subject to insane outbreaks, cannot be taken into the colony.

DONATIONS TO THE COLONY.

The law permits the board of managers to take and hold in trust for the state any grant of land, gift or bequest of money, or any donation to be applied, principal or income, or both, to the maintenance and education of epileptics and the general uses of the colony. Charitably disposed people have here an opportunity for the beneficent use of money, and it is hoped that memorial buildings in the way of chapel, library, museum, gymnasium, school, shop, or cottage houses, bearing the donors' names, may in time be erected.

OFFICERS OF CRAIG COLONY.

The State Board of Charities has jurisdiction over this colony. The board of managers consists of Dr. Frederick Peterson, president, 60 West Fiftieth street, New York; Mrs. Charles F. Wadsworth, Geneseo; H. E. Brown, Mount Morris, secretary; W. H. Cuddeback, Buffalo; Charles E. Jones, M. D., Albany; L. S. Oatman, Buffalo; Judge O. P. Hurd, Watkins; Jeanette B. Hawkins, Malone, and H. A. Phillips, Lowville. The medical superintendent is Dr. William P. Spratling, Craig Colony, Sonyea, N. Y.

THE Buffalo Antitoxic Company, 35 West Eagle street, announces that it is now prepared to furnish a reliable serum for the treatment of diphtheria. The serum has been thoroughly tested and will be found as labeled. Tests have also been made by Dr. Wm. H. Park, of the New York Board of Health, and he reports the serum to be of standard strength.

The production of antitoxin was commenced last December. The plant has been enlarged and perfected and now the finished product is submitted for consideration. During the past few months many physicians have used the antitoxin manufactured by the Buffalo Antitoxic Company in the treatment of diphtheria with good results.

The *antitoxic serum* is supplied in *two strengths*, each vial containing 10 c. c.: No. 1 vial (white label), 800 normal units; No. 2 vial (red label), 1,500 normal units.

The contents of vial No. 1 will ordinarily suffice for a fully developed case of diphtheria in a child under ten years of age. For a fully developed case of diphtheria in an adult the contents of vial No. 2 should be given.

As a prophylactic for children (who have been exposed to diphtheria), it is advised that ½ c. c. of contents of vial No. 1 be given for each year of their age. For adults, use the entire contents, 10 c. c.

Administration.—It is advised that a syringe holding the full quantity be used and injected under the skin at one operation. The place selected should be where large folds of skin can be raised, as the chest, just below the clavicle or thigh. Places on which the patient is accustomed to lie should be avoided.

Caution.—The vials which contain the remedial serum should be excluded from light and kept in a cool place. Also, under all circumstances, the general laws of antisepsis should be observed regarding the parts to be injected, and especially the cleansing of the *injector* and *needle.*

Remarks.—The horses selected by the Buffalo Antitoxic Company for the production of antitoxin are young, healthy and absolutely sound. The serum is prepared with the most scrupulous care. During the immunising period the temperatures are taken twice daily, thereby showing the progress. The utmost care in food, grooming and exercise is observed, thus insuring a healthy condition of the animal.

RECENT graduate or student wanted to devote four or five hours a day to visiting local physicians in the interest of our specialties: Ferratin, Lactophenin, Papain, Cocaine, etc. Address C. F. Boehringer & Soehne, 7 Cedar street, New York.

Literary Notes.

THE *Archives of Pediatrics* will commence its thirteenth year with the January, 1896, number, under the business management of E. B. Treat, publisher, of New York. The *Archives* has been for twelve years the only journal in the English language devoted exclusively to diseases of children, and has always maintained a high standard of excellence.

The new management proposes several important changes in its make-up, increasing the text 15 per cent. and enlarging its scope

in every way. This will give room for the fuller contributions of additional collaborators who have been secured for the various departments.

The editorial management will remain in the hands of Floyd M. Crandall, M. D., adjunct professor of pediatrics, New York Polyclinic, and chairman of section on pediatrics, New York Academy of Medicine.

Mr. W. B. Saunders, Philadelphia, announces an American Year-Book of Medicine, edited by Dr. George M. Gould, of Philadelphia, that will be ready for delivery January 1, 1896. It is Mr. Saunders' intention to publish this work yearly in the expectation that it will have an extensive sale throughout the United States as well as abroad. It is the special purpose of the editor to review contributions to American journals as well as those of Europe, thus making the year-book international in character.

The work will be replete with original and selected illustrations skilfully reproduced, for the most part in Mr. Saunders' own studios, established for the purpose, thus insuring accuracy in delineation, affording efficient aids to a right comprehension of the text and adding to the attractiveness of the volume.

Weight chart for infants is a new chart published by the Just's Food Company, by which the weight of an infant, from birth to two years of age, may be recorded from time to time. Such a record is not only valuable to the physician, showing at a glance whether the child is properly gaining in weight, but it will also be an interesting souvenir to the mother. On the chart is a model line as a guide for an average child. By referring to our advertising pages it will be seen that this chart will be sent free to any address. It is certainly something novel, and we believe will prove of great value.

Physicians' Protective Association.—At a well-attended meeting of the Buffalo Physicians' Protective Association, held at the Academy of Medicine parlors, Wednesday afternoon, October 16, 1895, the following officers were elected for the ensuing year: President, Dr. John N. Goltra; vice-president, Dr. Thomas F. Dwyer; recording secretary, Dr. John G. Meidenbauer; financial secretary, Dr. J. N. Kraus; treasurer, Dr. William G. Ring.

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Original Communications.

TREATMENT OF HEADACHE.[1]

BY FLOYD S. CREGO, M. D.,

Professor of insanity and diseases of the brain and clinical instructor in nervous diseases in the Medical Department of the University of Buffalo.

BEFORE presenting to you the subject which constitutes my address as president of this society, I desire to express to you my heartfelt thanks for the honor conferred upon me, by selecting me as your presiding officer. The work which has been accomplished by this society in the twenty-eight years of its existence, cannot be over-estimated. Many papers are presented of scientific value each year and great good has been accomplished in engendering professional and fraternal feeling by the society.

The subject to which I direct your attention is a discussion on the treatment of the severer forms of headache. Headache, as a general rule, is the result of various diseases and hence is only a symptom, and "we know almost nothing of the structures in which the pain of headache is felt, or the mechanism of its production." The subject is one on which it is easy to theorise, but there are no facts that give to any hypothesis a considerable degree of probability. One conclusion is, however, suggested by the symptoms that the seat of the pain differs in various cases. Some writers would have us believe that the dura alone is the sensitive portion of the contents of the skull, with the exception of certain cranial nerves. Again, we are told all of the membranes and the cortex may be the seat of pain. As I have already stated in the above quotation from a celebrated author, all theories as to the seat of the pain in headache is mere speculation, but many things point to the fact that any of the membranes of the cortex and the

1. President's address before the Central New York Medical Association, Syracuse N. Y., October 15, 1895.

cerebral structure itself may be the seat of the pain. "Whether pain is produced directly by morbid states of the cerebral tissue we cannot say." We are certainly not justified, however, in denying this seat of pain. It may be caused by organic processes which do not involve the surface. "After a necrotic softening in the ganglia, headache is common on the side opposite to the hemiplegia and the diffuse pain of hemicrania may be on the side opposite to that of the sensory symptoms." Many of the morbid states which give rise to headache are found in the fact that the brain is shut up in an unyielding cavity and while the weight of the brain is as but one to forty, one-fifth of all the blood in the body circulates in the brain constantly, and frequently, through vascular relaxation, the brain becomes suddenly engorged with blood, or, on the other hand, through weakening of the heart's action the cranial cavity is more liable than any other organ to be slowly filled with improperly oxygenated blood and irritation of the cortex takes place. The brain is frequently furnished with improper and deficient quality of blood, which rapidly gives rise to molecular changes and disturbances of the nerve cells. Again, the brain is irritated through various organs by which it is connected by the nerves, although this is not so common as many authors would lead us to suppose. Chief among them is the eye, the stomach and the uterus. Headache is invariably the result, too, of growths in the cranial cavity and of inflammation of any portion of its membranes or the substance of the brain. It is also produced by the action of toxicants and of drugs. A continuity of causes oftentimes produces the same results and we see this exemplified in headache as well as in many other diseases. There is first the influence of excitement and over-stimulation to the brain and then the influence of exhaustion. "When both act in concert, how rapid is the downfall."

The subject of headache is very perplexing; as we have said, it is but a symptom and we have to look for the cause in other organs, and when apparently we have discovered the cause, we attempt to remedy it by treating the seat of the disease and we often fail. This is demonstrated very clearly in headache due to eye-strain. We all know that a vast majority of headaches we are called upon to treat are due to eye-strain and yet, when we attempt to relieve the headache by the proper adjustment of eye-glasses, or cutting of the muscle, we do not accomplish our purpose, for we find through this eye-strain that other functions have been dis-

turbed, such as digestion and functional disease of the stomach has been induced and through improper action of this organ we have malnutrition, and malnutrition gives poor blood, and poor blood gives poor blood-supply to the brain, and if this continues for a long time, molecular change and instability of the nerve cells. Thus we see in the treatment of such a case, what a vast territory we have to cover. First, of course, we have a competent oculist correct the eye-strain and then direct our attention to other functions which have been deranged. Here another difficulty meets us. Our patients become restless under prolonged treatment and go from one physician to another, giving none a proper opportunity to accomplish anything. Another difficulty we encounter in the treatment of headaches is that we have no objective symptoms, only subjective. Pain is pain to a person who suffers from headache; it has no degree by which it can be gauged, and the aching cerebral mass shut up in the bony cavity only reveals its morbid condition by the statements of the sufferer. Thus there is no disease or symptom which taxes the experience or scientific knowledge of a physician more than this and no case can be fathomed, as a general rule, without close observation and study, but it is not within the province of this paper to discuss many of these conditions, but rather to direct your attention to a few of the severer forms of headache.

Before proceeding, I wish to exhibit to you a diagram, which is very accurate, according to my experience, and which is taken from Dana's work on nervous diseases, which shows the location of the pain in headaches from different causes. Of this, Dana says: "The accompanying diagram shows some of the relations of localised pain to the cause. A large experience, both in my own practice and that of others, shows it to be approximately correct." As already stated, I consider this quite correct and of diagnostic value.

The first form of headache to which I direct your attention is megrim or migraine. This form of headache is sometimes called sick or bilious headache. The first name is given it on account of a persistent symptom of the disease and the second, bilious, points to a theory of causation which we shall see later on, carries us back to the time when the ancient and now for many years obsolete humoral pathology still prevailed. This disease is not very common; in fact, I might say it is rare. It is essentially an inherited disease; in all cases not direct, but the ancestors of nearly every sufferer from this disease are nervous subjects. The most severe

case I ever had under treatment was that of a maiden lady whose mother had had megrim and yet all of her sisters had escaped, but several of her sister's children also had this disease in an aggravated form. We find it comes on between the ages of seven and fifteen and females are more often affected. That it is paroxysmal as well as periodic in character. The attacks in early life are so mild and of such short duration that their true character is overlooked by the physician and many will not agree with the statement that it occurs in such young subjects for this reason.

By the laity and many physicians the paroxysms are thought to be due to some gastric or digestive disturbance. Occasionally this is so, but usually the gastric disturbance is the result and not the cause. A patient, recently under treatment, had a paroxysm about every three weeks and believed the attack was caused by some indiscretion in eating, lived on milk and light soups for many weeks without any improvement in the disease. It is not dependent on menstruation, as we see it begins most always long before the menstrual epoch. In many cases we seem to have a multitude of exciting causes to bring on the paroxysm: the over-use of eyes when eye-strain is present, mental overwork, excitement, severe and sudden changes in the weather. "There is nothing in this to cause surprise when we reflect on the great physiological law, that in proportion as the nutritive and vegetative functions are feeble and languishing nervous phenomena are mobile, exalted and irregular,"—a law which has been admirably formulated in the simple observation of Hippocrates, "*sanginis moderator nervorum.*"

Therefore, whatever tends to lower the standard of health will produce, in some cases, an aggravation of the disease. Again, we see the paroxysm come on without any exciting cause, which gives credence to the theory of the disease which I will propose later on. Thus we see it is a permanent malady, lasting in many cases through the greater part of life, but is only manifested at more or less distant intervals in distinct attacks, or seizures of a well-defined character of a limited duration, leaving the patient, with few exceptions, in the enjoyment of his usual good health in the interval.

There are many theories as to the cause of the disease. The most popular in former times was the bilious or gastric, but these have now been discarded. Again, there are theories of vascular disturbance and these are three in number: active hyperemia, that

is from some particular unknown cause; there is a determination of blood to the brain and a paroxysm follows. Again, venous congestion, or stasis, has been propounded and advocated as a cause. Again, irregularities of distribution from spasm or relaxation of the smaller capillary vessels is said to produce it. The theory of Dubois Raymond is that of vaso-motor spasm, and yet this could not explain all the symptoms, especially the pain.

Prof. Dubois Raymond maintained that in megrim a spasm takes place in the muscular coats of the vessels of the affected half of the head. Dr. Latham's theory refers to anemia of the brain and I should be inclined to this theory if we were forced to take a vascular disturbance as the basis of our speculation.

The theory advanced by Liveing is that of nerve storm, or nerve explosion. He claims there is a certain amount of pent-up nerve force in the brain constantly and, as a general rule, it is under our control to use as we desire, but from disease or irritation of the nerve cells this force is exploded at certain times, without a stimulus and produce many nervous phenomena; in one case epilepsy, and another megrim and so on. Thus this disease in its symptomatology exhibits "as a whole that kind of accession, culmination and subsidence which essentially belonged to epilepsy."

"On this theory, then, the fundamental cause of all neuroses is to be found, not in any disorder or irregularity of the circulation, but in a primary and often hereditary vice or morbid disposition of the nervous system itself. This consists in a tendency on the part of the nervous centers to irregular accumulation and discharge of nerve force, to disruptive and incoördinated action in fact."

"The concentration of this tendency in particular localities, or about particular foci will mainly determine the character of the neurosis in question." In the one case, epilepsy may be produced, in another, megrim. This theory of megrim is not sustained by Gowers, Dana and others, yet it has a considerable following.

Gowers maintains this is a disease primarily of the nerve cells of the higher brain centers. He says:

The hypothesis that the derangement is primarily of the brain, enables us better to understand the relation to the other neuroses and especially that to epilepsy, which is occasionally so distinct. In epilepsy, as we have seen, we must assume a disturbance of function in some cases so similar in character that we cannot doubt the identity of its seat, with that of migraine, but the process in the two differs in its

course, associations and other features and these imply an essential difference in its minute character.

However, the theory that the discharging lesion is from the cortex of the posterior lobes of the brain, especially where ocular disturbance is present, or in that part of the sensory area which is the anatomical correlative of the sensation of pain in the head, is supported by many of the best authors. The symptoms are those that are present just before and after the attack and those which are present between the paroxysm. The symptoms are too well known to you all for me to review them here. It is only necessary for the purpose of treatment to keep in mind the general division.

The diagnosis of megrim is usually not difficult. It is, however, frequently mistaken for organic headache, or the headache of organic brain disease. In chronic organic brain disease we have no history of heredity and of paroxysms early in life. The pain of organic brain disease is usually always present in a mild degree and never entirely absent, although at times it becomes more severe and thus seems paroxysmal in character. The age of the patient, the history of the case and the presence in organic headache of some localised paralysis or tremor will assist us. The pain in organic brain disease is usually not unilateral.

Headache, due to malarial poisoning, is also often mistaken for megrim. Here we have the paroxysm coming on very frequently, and there is, usually, no previous history in malarial poisoning. Supraorbital neuralgia is apt to be confounded with megrim, but the symptoms of the two affections differ from each other in so many ways that they can hardly be regarded as belonging to the same category. Romberg thought the pain in hemicrania was due to hyperesthesia of the brain, and, consequently, he called it neuralgia cerebralis, in order to distinguish it from peripheral neuralgia, and, although this view is not accepted in its entirety, the opinion is gaining ground that the seat of pain is within the cranial cavity in hemicrania. All three divisions of the trigeminus send branches to the dura mater, and some maintain that here the seat of pain is located in megrim, instead of in the cerebral mass. It is certainly demonstrated that it is within the cranial cavity, while the pain in supraorbital neuralgia is outside the skull. In the treatment of the disease, we must keep in mind the fact that we have a nervous subject to deal with, and that tonics and nerve sedatives are indicated. Thus, a combined tonic and seda-

tive treatment is of great value. Some form of iron in anemic subjects, and some form of the hypophosphites in those where simply a nerve tonic is desired, are indicated; and, in both cases, always use a sedative. The best sedative is some form of bromide. It has been demonstrated by Clark and others, that the bromide acts on the cerebrum by quieting the action of the nerve cells. It renders them more stable and lessens the tendency to a nerve storm, hence, the continued use of a bromide in megrim is clearly of advantage. Ringer speaks highly of cannabis indica, and considers it one of the most valuable remedies that we possess for sick headache. He thinks it is most useful in preventing the attacks, not in arresting them when they have once begun. From a quarter to a half a grain of the extract, or ten minims of the tincture may be given. In this connection, I desire to mention a remedy which has been on the market for some time, which is of undoubtable value in this disease—namely, neurosine. It is a combination of the bromides with cannabis indica. The dose is a dram repeated frequently. In giving the bromides continuously, a small dose should be employed, and if acne occur, as it will in most cases, give a small dose of Fowler's solution, say three to five drops, twice a day, for a week at a time, to relieve this. The galvanic current is very useful in some cases, giving it continuously through the head with a large electrode on the forehead and a small one on the back of the neck. A very weak current should be used. The breaking of the current is recommended, but it is very harmful. The static current is of undoubted value; it should be given over the head. In a case which I had under treatment last Summer, this was used, and succeeded in breaking up the attack quite often.

To break up the attacks, we possess at present very useful remedies—namely, antipyrin, antifebrin, phenacetin and exalgyn. The combination of the antifebrin with citrate of caffein and monobromide of camphor in a tablet called "migranine" is by far the best. About four grains of the antifebrin, one grain each of caffein and camphor may be given at a dose, and continued at intervals of four hours for a day in the endeavor to ward off the attack. They do little, if any, good when an attack has come on. The pain during an attack is best controlled by chloral or morphine. The danger of creating the morphine habit is so great that it almost entirely precludes its use, but occasionally it may be used. The chloral, however, can be given, and if vomiting prevents its administration by the mouth it is quite as readily absorbed by

the rectum. After the attack and, indeed, between the attacks nitroglycerine is very highly commended.

In the majority of cases, and especially those in which there is conspicuous pallor in the early stage, this is a drug that has the most influence, given regularly during the interval, just as bromide is given for epilepsy, it has a striking effect in many patients, rendering attacks far slighter and less frequent, and often stopping them altogether. It should be given twice or three times a day after food; if taken when the stomach is empty, it passes rapidly into the blood and may cause brief cephalic discomfort, which, though not objectionable in itself, sometimes deters the patient from continuing the medicine. To avoid causing alarm, it is, therefore, desirable to begin with a small dose, one $\frac{1}{120}$ or even $\frac{1}{100}$ of a grain. The most convenient mode of administration is in the 1 per cent. solution of alcohol, now termed tincture trinitrin (B. P. Sup.). It can be given with tinctures or acids, but it is decomposed with alkalies. A very useful combination is with tincture of nux vomica, tincture gelsemium and dilute phosphoric acid, or with citrate of lithia and the acid syrup of lemons.

During the attack this should be always discontinued. Tincture gelsemium is another remedy which for many years has been employed by homeopathic practitioners in all head troubles. In this disease it is useful after the attack to allay the nervous irritation often seen.

In certain classes of cases, considerable doses of iodide of potassium with ergot are of great value. Time will not permit my calling attention to all the remedies which have been recommended, and it is needless for me to speak of the dietetic and hygienic treatment—they are well known to you. Among the many accessories, however, which are often neglected, are exercise and physical culture; too great importance cannot be given to these. Develop the child physically and we have one of the greatest adjuncts in the treatment and safeguards against the disease.

Another severe and distressing headache is that which occurs in the progress of syphilis. It is essentially a tertiary manifestation. It occurs so frequently just after or even with the secondary stage that its true character is often overlooked; indeed, it may often occur as a secondary manifestation, and when it so occurs it is rather to be classed as a toxemic condition, due to the peculiar condition of the blood. When it occurs, it is more often a tertiary manifestation, and is due to syphilis of the brain, either a neoplasm in the coat of the artery, or several arteries forming thrombi, or gummata, or as a syphilitic pachymeningitis.

The headache of cerebral syphilis may occur from one month to twenty years after the primary sore. Fournier claims that two-thirds of the cases of cerebral syphilis are of the thrombotic variety, and in this case the headache is due to cerebral anemia. As regards the length of time before syphilis may attack the nervous system, we find a diversity of opinion. Dayale is said to have found paralysis of the portio dura a month after the first symptoms of constitutional syphilis. In the case of M. X., reported by Ad. Schwarz, headache came on the fortieth day after the appearance of the primary sore and a hemiplegia the forty-sixth day. This citation of cases might be extended, but it is sufficient to say that nervous syphilis may occur, not very rarely, within two months after infection and many occur in six months. Headache in the various forms of cerebral syphilis is most distressing. It is usually localised, although occasionally general, and is easily diagnosticated by the presence of some other manifestation of the disease, such as temporary loss of power in an extremity. The ophthalmoscope will, usually, reveal a choked disc. There is also psychical disturbances and often partial epileptiform attacks. The attacks of headache are decidedly paroxysmal in character and are subject to acute exacerbations. They are always worse in the night time.

Heubner asserts that when this headache is localised it is generally made distinctly worse by pressure at certain points, but this is thought by others to exist only when the bone or periosteum is diseased.

The treatment—and my object in calling attention to this form of headache is the treatment—consists in the large doses of iodide and bromide potassium. The iodide should be pushed to the point of toleration, and this, in many cases, is almost without limit. Patients who suffer from cerebral syphilis take from 200 to 300 grains daily of the iodide of potassium without ill effects. The best method of administration is by commencing on twenty grains three or four times a day, largely diluted in water, and increased ten or twenty grains a day until sixty or eighty grains four times a day are taken. To control the pain, bromide of potassium, and, in some cases, chloral added, will be found to suffice. In many cases the acute paroxysm takes the form either of meningitis or else of a brain congestion. To relieve this, venesection should be employed. When the pulse is full and bounding and this is not resorted to, aconite and ergot are indicated.

Mercury, too, should be employed, and, when given, can be best used in the form of an inunction and as large doses as half a drachm of the unguentum hydrargyri being used once or twice a day until slight salivation is noticed, and then discontinued for a time. The galvanic current applied to the head, by the method already described, is of undoubted value. Stillingia and some of the compounds of the drug are of value, but should not be relied upon. The headache from eye-strain is another most troublesome form to treat. The pain is, in some cases, constant and, again, paroxysmal in character, coming on after the excessive use of the eyes. It is, however, seen very frequently in persons who do not use the eyes so excessively. The pain is characteristic. First, it is referred to the eyes and from there to the temples and to the back of the head, as shown in this diagram. After it comes on, it is described as a constant pressure-pain, referred to one or all of these portions of the head. The eye-strain is so frequently the cause of stomach disturbance that this is often mistaken for the whole cause of the trouble, while, in fact, it is but secondary to the eye trouble, and the digestive derangement is treated for months without any result. Again, the stomach trouble gives rise to malnutrition and cerebral anemia, and thus the physician is apt to consider it simply a condition of cerebral anemia, or irritation, due to an improper blood state. The treatment of this form of headache consists in the proper adjustment of eye-glasses to correct any focal lesion or want of proper muscular balance. The muscular strain is, in a vast majority of cases, dependent on the focal lesion, and corrects itself after the focal lesion is relieved, or it is dependent on general weakness, just as any muscle may be weak if there is any general physical derangement and weakness. To correct muscular strain, many plans have been suggested. First, tenotomy of the weaker muscles and shortening of the weaker muscle; and the plan proposed by Ranney and Stevens, which is that of establishing muscular balance by graduated tenotomy of the stronger muscle, so many striæ of the muscle are cut at different times until the muscular strain is overcome. This plan has not been accepted by oculists in general. It has the disadvantage of making two weak muscles in place of one; it is on the same plan as treating a case of hemiplegia or facial paralysis, due to a cerebral lesion, by producing artificially a lesion on the opposite side to give the same amount of paralysis as in the part already affected on the opposite side.

The plan adopted by oculists to overcome muscular strain is, first, correct the focal lesion; second, constitutional treatment to strengthen the muscle, and third, exercising the muscle by the use of prism to strengthen it and establish the normal power. The difficulty encountered in the treatment of these cases is in getting our patient to consult an oculist. When this is suggested, they say they were never conscious of any eye trouble; on the contrary, their eyes are remarkably good. Once they have consulted an oculist, they expect immediate relief. This is not always so readily obtained, and patients not receiving the relief they imagined they should, believe that eye-strain is a myth. In some cases the relief is immediate after the proper adjustment of the eye-glass, but in the vast majority of cases other symptoms which have resulted from the eye lesion must first be corrected to give the desired result. The treatment of these conditions is made very easy with the aid afforded by the oculist, and stomach derangements and systemic disturbances disappear under appropriate treatment where before they were intractable.

469 DELAWARE AVENUE.

FRACTURE OF THE GREATER TUBEROSITY OF THE HUMERUS, WITH THE REPORT OF A CASE.[1]

BY A. L. HALL, M. D., Fair Haven, N. Y.

FRACTURE of the greater tuberosity of the humerus is remarkable alike for its great rarity and the peculiar deformity it presents.

The simple form is extremely rare and has been met with only in a very few instances. Mayo, Hamilton, Stimson and two other writers record for themselves as having met a single case each. The fracture, however, is usually seen in conjunction with either the forward or downward variety of dislocation, and as a luxation complication it is an accident of very infrequent occurrence. Very few surgeons, of even wide experience, have ever observed a case, either in its simple or complicated form, and the systematic writers, for the most part, fail to note the history of any particular cases, from which fact it may be reasonably inferred that their individual experience has been wanting.

1. Read at the twenty-eighth annual meeting of the Medical Association of Central New York, October 15, 1895.

As might be expected, from our limited knowledge concerning this fracture, there exists a divergence of opinion respecting the relative importance of the causes which operate to produce it. Age, external violence and muscular action are factors of greater or less importance. Age, without doubt, is a powerful predisposing cause. In four cases of the simple fracture, the average age was fifty-five years, and in five instances, complicated with dislocation, the average age was fifty-nine years. Excluding Stimson's case, aged nineteen years, from the cases of simple fracture, the average becomes sixty-seven years. For all conditions the average age is fifty-four years. To external violence received directly upon the point of the shoulder the majority of authors attach greatest importance as a causative factor. The size and anatomical relations of the tubercle—deeply situated and highly protected by muscular coverings—appear to almost preclude the possibility of the occurrence of direct injury sufficient to produce separation. A study of the history of the recorded cases shows, by far, the greater number to have been unattended by direct outward injury, while, upon the other hand, several surgeons of note have met cases in which the separation of the tubercle was due to the powerful contraction of the spinate and small teres muscles. It is a rational conclusion, therefore, that the chief predisposing cause is advanced age, and muscular action the principal determining cause of this fracture.

The fracture is remarkable for the greatly increased width of the shoulder. Some authors assert that its breadth is nearly doubled. This is evidently a grossly exaggerated statement, as the actual increase doubtless rarely equals one inch. An abnormal flattening over the deltoid region produces an appearance of widening greater than really exists. The true increase in shoulder width is occasioned by the inward rotation of the head of the humerus, which has been released from its natural position by detachment of the tubercle and the consequent loss of opposing muscular power. The shoulder contour and the attitude of the extremity simulate somewhat closely the appearance of dislocation, for which the fracture may be mistaken. The acromion appears unusually salient, the arm is separated from the side and the elbow is thrown outward from the body.

The detached tuberosity is drawn upward and backward by muscular contraction and the head of the humerus is turned inward. Crepitus is readily elicited by rotating the humerus

while direct pressure is exerted over the tuberosity, or while the head of the bone is firmly held within the grasp of the hand. The length of the arm is preserved and the thumb cannot be pressed into the glenoid cavity, as in dislocation. Deformity is easily overcome by proper manipulation, but usually returns when the arm is released. When the tough, tendinous periosteum about the

Fig. 1.

HALL—FRACTURE OF THE GREATER TUBEROSITY OF THE HUMERUS.

muscular insertion into the tubercle is untorn, there is very little displacement. The furrow betwixt the head of the bone and the separated tuberosity, of which so much has been said by writers, is more fanciful than real and, evidently, exists only in a slight degree. Some authorities state that muscular power is completely lost. This assertion is untrue, the loss of power being principally confined to active outward rotation, which is nearly or completely overcome.

Many forms of dressing have been advocated for maintaining the reduction, none of which appear to have fully met the requirements of a bad case, and it is extremely questionable if any dressing or appliance can be devised which will counteract all deformity. Most of surgeons favor the use of the axillary pad, but for what reason, unless it be from the force of habit, is not apparent. A small pad of absorbent cotton, or gauze, favors cleanliness of the parts and may prevent an annoying intertrigo, especially in hot weather; but it certainly affects nothing in retaining the parts in proper position. The various forms of splints have little or no utility in holding the fragment in place, and the claim that direct pressure may be utilised to effect this object is, to say the least, an erroneous assumption, for the tubercle is too small and too deeply placed to be efficiently controlled by pressure. The principal indication is to overcome the inward rotation of the head of the humerus. If the tendency to rotation is not present, as may be the case in incomplete separation, simply confining the arm to the side, with the forearm carried in a sling, is all that is required. In other cases, where avulsion of the tuberosity has been complete and marked inward rotation of the humerus resulted, that form of dressing should be employed which will most effectively secure the desired amount of outward rotation of the arm, thus practically restoring the tubercle to its natural site upon the head of the bone. To effect this purpose, the arm is nearly encircled with a broad strip of rubber adhesive plaster; commencing at the inner posterior surface of the arm, the plaster is carried forward over the outer surface, continued backward and attached to the back, while the arm is properly abducted. A piece of gauze is interposed betwixt the arm and the body, and the arm is secured to the side by an additional strip of plaster or by a few turns of a bandage encircling the arm and body. A sling for the forearm should not be used, as it favors inward rotation, thus defeating the object which the dressing aims to secure. The forearm should be left free and the patient should be instructed to favor outward rotation. This dressing is shown in photograph 1.

Writers generally agree that satisfactory bony union is the rule. Such a result is probable in young subjects, but in the aged, in whom the greater number of fractures occur, union, for the most part, is evidently of a fibrous character. The histories of recorded cases appear to confirm this conclusion.

Impairment of the function of the shoulder-joint apparently is the rule after this injury. The joint remains tender and painful for a long time, and when the articular surface is involved, as sometimes happens, bone spicula may complicate the case, resulting in a permanent and uncomfortable form of injury. Fibrous union is oftentimes followed by severe and lasting lameness.

Fig. 2.

HALL—FRACTURE OF THE GREATER TUBEROSITY OF THE HUMERUS.

Passive motion, if undertaken too soon, is productive of bad results and should not be instituted until union has taken place.

The following history of a recently observed case well exemplifies some of these points:

R. C., aged 64 years, laborer, strong, active and well-preserved for one of his years, while walking at a rapid pace tripped and fell, striking upon the right hand, partially breaking the fall and finally landed upon his right side. There was no bruising or other evidence of external injury, save a small superficial abrasion of the skin upon the

outer surface of the lower third of the right arm. No ecchymoses were observed upon the shoulder or elsewhere at any time. Inspection revealed the characteristic widening of the shoulder and the usual flattening over the deltoid region, the arm being in a state of exaggerated adduction with the elbow projecting outward from the body. At first, dislocation was suspected, but this was speedily allayed for outward rotation of the arm readily overcame the deformity and at the same time elicited faint crepitus. The head of the humerus was within the glenoid cavity and moved freely in response to rotation of the arm. Careful manipulation disclosed a fragment of bone lying in contact with the acromion. Pressure exerted over the fragment, with the arm in a position of extreme abduction, brought the separated surfaces in contact and by outward movement of the humerus very distinct crepitus was produced. There was no shortening of the arm and extension, with upward pressure from the point of the elbow, provoked no increase of pain. Simple fracture of the greater tuberosity of the right humerus, due to muscular action, was diagnosticated. A sling and axilliary pad with the arm firmly bandaged to the side in a position of moderate abduction was the dressing employed during the first twelve days. At the expiration of this period the dressing was removed and one of rubber adhesive plaster substituted with better results; outward rotation being more effectually maintained under its use. This was continuously worn until the forty-fifth day, when the arm was released and passive motion induced.

The result of this case, three months after the receipt of the injury, is briefly stated as follows: fibrous union, as shown by the mobility of the fragment and the presence of crepitus, has taken place. The humerus is not shortened. There is some inward rotation of the arm, in consequence of which the shoulder width is increased three-eighths of an inch. The joint function is impaired, motion being considerably restricted and quite painful. The scapular muscles are wasted, notably so is the infra-spinatus, its extent being shown by the marked depression of the scapular surface in photograph 2. The power of active voluntary motion is diminished. Particularly true is this of outward rotation, which is feebly performed. Much improvement of the present condition will unquestionably follow and, upon the whole, the probable result will be better in this instance than is usual with cases occurring at an advanced period of life.[1]

The deductions to be derived from what has been presented concerning fracture of the greater tuberosity of the humerus may be briefly summarised as follows:

1. It is an occurrence of great rarity.

1. The photographic views presented were taken from this case three months after the receipt of the injury.

2. The chief predisposing cause is advanced age.

3. The most frequent determining cause is muscular action.

4. There is but one principle of treatment involved—that of proper humeral abduction.

5. Fibrous union, considerable permanent widening of the shoulder, diminished power of outward arm rotation with some impairment of joint function is the rule after this fracture.

AURAL, NASAL AND LARYNGEAL TUBERCULOSIS—WITH SPECIAL REFERENCE TO THE ADIRONDACKS AS A WINTER HEALTH RESORT.[1]

BY SARGENT F. SNOW, M. D,

Aurist and laryngologist to the House of the Good Shepherd, Shelter for Unprotected Girls and the Syracuse Free Dispensary; member of the Central New York Medical Association, the Syracuse Academy of Medicine, the Onondaga County Medical Society, etc.

TUBERCULOSIS of the ear, nose and throat is a subject too broad in its entirety to admit of an exhaustive paper that can be read in the time allotted to me. I trust, then, that you will pardon brevity in my treatment of some of the components of this article and my evident haste to get to the latter part of the subject, i. e., laryngeal tuberculosis and the Adirondacks as a winter health resort.

Aural tuberculosis, the first on my list, is a comparatively rare disease, and upon which there appears to be a very small amount of literature. This latter fact may be accounted for if we remember that it usually comes in the course of general tuberculosis and is not thought worthy of much notice, except we be looking for every possible source of tubercular infection.

Hartman claims, in his hand-book, "That we may explain general tuberculosis originating in the ear from the entrance of tubercular bacilli from the outside into the deposit of pus, which find there a favorable soil, spread thence over the body and thus produce general infection." Direct transmission of tuberculosis, from the sputum to the mucous membrane of the tympanic cavity, may also take place through the Eustachian tube.

The symptoms of tubercular infection of the ear are commonly non-inflammatory; some deafness or discharge first attracts the patient's attention and then the aurist is consulted. Inspection, in

1. Read at the twenty-eighth annual meeting of the Central New York Medical Association, held at Syracuse, October 15, 1895.

the earlier stages of the trouble, will usually show more or less infiltration of the drum membrane and a distinctly circumscribed smooth nodule, of reddish appearance, about as large as a hemp seed. This first one will be followed by a second nodule, with the first one undergoing a disintegration, and later a complete perforation of the drum occurs. The treatment should be thorough cleansing and careful applications of a 40 to 80 per cent. lactic acid solution on a probe, and such constitutional remedies as are prescribed for the general tubercular condition that is usually present.

Tuberculosis in the nasal passages is more rare than in any other part of the respiratory tract—perhaps one in 300 cases. Bosworth states "That he finds but twenty-seven cases reported in literature." I, myself, have treated but one case, and that was of the hyperplastic form. The course of the disease is like the ordinary tubercular ulceration that is found in other portions of the air tract. Sometimes it shows itself in the form of small tumors, presenting a mammillated or raspberry appearance. The first described, or ulcerative form, usually comes on the septum or floor of the nares, while the hyperplastic form is more frequently found on the turbinated bodies. Tubercular ulceration, wherever it may be, presents certain distinguishing features. The surface is of a whitish-gray color and not depressed below the surrounding tissue. It is somewhat rounded, but irregular, while the mucous membrane bordering upon it appears normal. The secretion is usually of whitish-gray mucus, rarely ever pus, and, as a rule, more or less profuse. The hyperplastic form presents, on inspection, small projections from the membrane of the turbinated bodies of a reddish-gray tinge. They are usually much smaller, more flattened and more regularly rounded than a papillomatous growth. Fortunately, a tubercular process within the nose does not materially affect the prognosis of the general disease to which it is secondary.

As to treatment, little need be said. The ulcerated surface should be scraped and a lactid acid solution applied, or, in the mammillated variety, the snare may be used, with the idea of totally exterminating the disease, where it appears feasible.

Tubercular ulceration of the pharynx is also a rare disease, many authorities claiming it to be seen in only about 1 per cent. of tubercular patients, while tubercular manifestations in the larynx occur in from 25 to 30 per cent.

Both Fraenkel and Bosworth are inclined to the opinion that

tuberculosis of the pharynx is a disease that may attack apparently healthy persons. There is a general view, however, that we may regard it as a manifestation of an *acute miliary* tuberculosis, the deposit occurring at the same time in the larynx, lungs and other parts of the body. In some instances, the disease appears late in the course of chronic tuberculosis. The appearance of a tubercular ulceration in the pharynx is characteristic, the ulcer being irregular in shape, very slightly raised, with poorly defined margins. Usually, in close proximity, can be seen small reddish-gray papulas, more or less confluent, and which will, within a few days, become an ulcerated area. In other cases, one or two isolated papulas may occur in an apparently healthy individual and remain latent for a long time. Tubercular ulceration of the pharynx and soft palate is a condition attended with many distressing symptoms, and, if not coincident with, is, certainly very soon after, followed by an invasion of the larynx. Along with the infiltration and ulceration there will be sharp, lancinating pains in the fauces, aggravated by deglutition and, in some cases, a rapid loss in the contractility of the palate and a consequent passage of food and drink into the nasal cavities.

Tubercular ulceration of this region may be mistaken for the superficial or deep ulceration of syphilis. Bosworth, in his recent work on the nose and throat, speaking of tuberculosis of the pharynx, says :

> The three appearances which I regard as important and somewhat pathognomic are the flush surface of the ulcer, the ropy mucous secretion and the almost uniform color of the ulcerated surface and its surrounding membrane. In syphilis, on the other hand, we have a rapid destruction of tissue in connection with active, localised inflammatory action. Hence, the secretion from the syphilitic ulcer is largely purulent ; it contains a certain amount of necrotic tissue, according to the rapidity of the ulcerative action. The ulcerated surface is notably hyperemic, while the mucous membrane surrounding it shows a well-marked areola, according to the extent of the gummatous infiltration from which it originally resulted.

Added to this, we have the fact that with the tubercular ulceration there are more or less systemic disturbances, which are absent in the later stages of syphilis.

The local treatment of these tubercular ulcerations consists in clearing off the surface with some alkaline spray, after which lactic acid should be thoroughly rubbed in. Some anodyne spray, as

a 2 to 4 per cent. solution of cocaine, may be used, especially before eating, to relieve the pain of swallowing.

Tuberculosis of the larynx is a more common but less virulent disease than tuberculosis of the pharynx, and takes on more of the symptoms that characterise pulmonary phthisis, which it usually accompanies, than of acute miliary tuberculosis. As we have said before, the *larynx* is involved in from 25 to 30 per cent. of the cases of pulmonary tuberculosis.

Virchow recommends it as the most appropriate place for the study of tubercules. To distinguish laryngeal tuberculosis from other diseases in the same region, Lennox Browne, in a very trite way, says: "It is quite certain that the pale, opaque tumefaction of the arytenoid cartilages, and the epiglottis in laryngeal phthisis, has not the clear transparency of serous edema, the active glandular inflammation of simple laryngitis, the hyperplastic infiltration of syphilis or the angry inflammatory irritation of carcinoma."

We should add that in some patients with general tuberculosis, a laryngitis may occur, which is not tubercular and in no way dependent upon tubercules within the larynx. It differs from simple laryngitis by being more intractable and more apt to recur.

The symptoms and general appearance of tuberculosis of the larynx I will describe by a review of two of my cases, and mention the treatment I have found to give best results:

March 6, 1893, Miss M., aged 18, was referred to me by Dr. A. B. Miller, for hoarseness and a suspected development of phthisis. This young woman claimed that her general health was perfect up to ten months previous, when a slight cough began which had continued as slight until January, when she took a severe cold. This was followed by hoarseness, cessation of the menses and night sweats. An examination of the larynx showed the right vocal band comparatively clear and white, but the left cord was red, thickened and rough. The interarytenoid space was somewhat infiltrated, but there was no tumefaction of arytenoid cartilages or epiglottis.

Temperature, 100⅘°; pulse, 112; respiration, 24. Physical examination of the chest disclosed nothing except a slight dulness and an increase in the expiratory sound, just below the right clavicle. I treated the patient with the usual constitutional remedies and the application of a 40 per cent. lactic acid solution to the ulcerated vocal band, thoroughly rubbed in three times a week, until April 8th, a period of one month. An examination then showed that the laryngeal trouble was almost removed, though a little thickening of the left cord and the tissues between the arytenoids remained. The voice was much

improved, though not perfectly clear. The constitutional symptoms were, on the other hand, more aggravated. Temperature ranged a degree higher, sputum was rich with tubercular bacilli and a physical examination showed a marked increase in the dulness below the right clavicle, with the addition of mucus râles.

Upon consultation, it was decided that the patient should go to the Adirondacks, where she could have the advantages that a better altitude, dry atmosphere, porous soil and exercise in the open air would give. Specific directions as to diet, cold baths and the like were given, and April 21st the young woman started for the North Woods. I find by my record of her case that she returned here October 5th, after a five and a half months' absence. Her temperature ranged at 99°, pulse 90 and respiration 20; flesh hard, good color and feeling in perfect health. The vocal bands were about the same as at the time I last saw her, the ulceration being completely removed. Physical examination revealed the fact that the active process in the lungs was stopped and only a slight dulness could be found in the affected portion. One week later, she came in and her temperature registered a degree higher. There was some return of the cough and her appetite was beginning to fail. An immediate return to the woods was advised, but she could not be persuaded to go until the middle of November. During the five weeks' stay here at her home she run down rapidly, having lost six of the twelve pounds gained during the summer and a decidedly active tubercular process involving the upper lobe of the right lung was apparent.

At this time, November 14, 1893, through the kindness of Dr. Vadeboncouer, a patient came under my care, presenting many symptoms in common with the one just mentioned:

Miss W., aged 20, giving the same history as Case I., except that the voice was completely lost and the constitutional symptoms were more pronounced. Examination of the larynx showed that both vocal bands were deeply ulcerated. The tissue between the arytenoids was much infiltrated and their apices showed the pale bluish-red tumefaction peculiar to tuberculosis. Examination of the lungs revealed that there was marked consolidation of the left apex, with quite large and numerous mucus râles. The general appearance of the patient, as well as the history, and the like, told plainly that we had to deal with a case of unusual virulence, and that a change of climate was more imperative than local treatment. She was also advised to try the Adirondacks, though it was just in the beginning of winter. Arrangements were made as soon as possible, but it was not until December 6th that she took her departure. In the meantime, active measures were taken to stop the ulceration within the larynx, using a 60 per cent. solution of lactic acid, thoroughly rubbed in, with the result that the

destructive process was stayed, though the infiltration between, and the swelling of, the arytenoids remained.

My next record of the two cases was made March 1st, when they informed me by a joint letter that the first, or Case I., weighed 128 pounds, a gain of thirteen pounds, and the second, or Case II., weighed 120 pounds, a gain of ten pounds in three and a half months.

May 1, 1894, I was trout fishing in that neighborhood, and I found that the first young lady was teaching school near by and was apparently well; but the one whom I sent last was losing ground. Upon looking into the matter, I learned that she, feeling as she expressed it, perfectly well, had neglected to take her cold baths and out-of-doors tramp each day, as had been directed. It was thought best to resume them and she soon began to regain the ground she had lost. When she returned to this city, August 1. 1894, I found her very much improved. Seemingly a good recovery, except the thickening of the vocal apparatus and some impaired breathing and dulness over the affected portion of the left lung. An examination, made October 15th, brought out the fact that the expected constitutional symptoms were returning, and, as circumstances did not seem to admit of a return to the woods, she soon began to fail and within three months died of pulmonary tuberculosis.

Case I., Miss M., taught school last winter, in the same region, and wrote me that she weighed 134 pounds, coughed but little and only when she took cold. Her voice was good but not perfectly clear. Called herself well. While on a short visit home, in February of this year, I examined her and found still a small consolidated area in the right lung, but no evidence of any active tubercular process. She is again teaching, and I venture to say that had she stayed in that climate continuously, and made no visits home, her recovery would have by this time been complete; though I should even now have to advise that she live in a climate suited to her until thirty-five or forty years of age.

I have selected notes from the two foregoing cases, merely because they represent so well the characteristic features of laryngeal tuberculosis and the many problems we meet in the treatment of such patients. As you remember, each one responded promptly to the local application to the larynx; but, in spite of our best efforts with these and the usual constitutional treatment, the pulmonary trouble increased until the patient was removed from the moisture-laden atmosphere of this section. As you noted also, each patient continued to improve while in a favorable climate taking her daily cold baths and out-of-door exercise; but even a visit home of one week would again start up the constitutional symptoms.

The best illustration of the comparative value of Adirondack air was shown when the two young women came home, August 1st, of last year, both equally improved and chances for life about even, so far as we could determine. The one who returned to the favorable climate continued to gain, whereas the one who remained here died within three months.

Another rule, which has proven true with both the cases mentioned and most of my other tubercular patients, is that the winter months seem even more favorable to them than the summer months. The fact is, I feel ready to take the position, and trust that others will sustain me, that we can just as safely send our patients, who are in the first or beginning the second stage of tuberculosis, to the North Woods in the dead of winter as in the balmy spring or warm summer months.

During the past two years, a goodly number of the tubercular patients under my care have been induced to take up their abode in the region drained by the Oswegatchie; although some have died, and perhaps others will eventually, I find that each has been materially improved, and those who have died only succumbed to the disease when, as in one of the cases mentioned, again brought under the influences of a bad climate.

It does not appear necessary that they should be in the heart of the woods or on the top of the mountains, but it does appear necessary that there should be a porous soil, so that they can breathe dry, pure air both day and night. I will admit that the tubercular patients that come to my notice are mostly laryngeal cases, but a great majority of them have such pulmonary complications that the situation is more or less serious. I will admit, also, that there may be other localities, in or near New York state, where these patients might do well.

As you well know I do not stand alone in being an advocate of the North Woods as a health resort. Other men of larger experience in tubercular therapeutics have written upon the same subject —notably Dr. Alfred L. Loomis, who, as early as 1879, wrote an article on the Adirondack region as a therapeutical agent in the treatment of pulmonary phthisis.

I simply want to place this paper before you for what little it is worth, hoping that it may help impress upon the profession the value of our Adirondack forests as a winter health resort, and the fact that in that region we have a natural, all-the-year-round sanitarium for consumptives.

The conclusions drawn from experience and the authorities consulted are:

First—That a thorough rubbing in of lactic acid, in the proper strength and at regular intervals, works nicely in allaying local tubercular ulcerations.

Second—That a continuous residence, or as near so as possible, with systematic bathing and exercise, in an altitude of from 1,000 to 2,000 feet, together with a porous soil and adjacent forests, will greatly benefit and perhaps cure even quite advanced tubercular manifestations.

Third—That we have here at home, in the Adirondacks of our own state, localities where many tubercular patients may find the climatic and physical environment required. In fact, my personal opinion is that they will receive more benefit there than from a residence in Florida, and full as much as could be obtained in Colorado or Southern California.

Fourth—That the patients do equally as well in fall and winter and gain more in weight than in the summer months; hence, we need not keep them here for "spring to open," but should insist upon an immediate removal, where practicable, from unfavorable climatic influences.

117 E. JEFFERSON STREET.

THE DECADENCE OF OPIUM ADDICTION.

BY WENDELL REBER, M. D., Pottsville, Pa.,
Oculist and aurist to the Children's Home.

FROM the early history of medicine up to a few years ago, opium in its galenic or alkaloidal derivatives was the chief agent in the hands of the physician for the alleviation of all pain. Its use by the profession was world-wide, and even the laity began to look upon the drug as a convenient and comparatively safe means to have at hand for relief.

The crowded condition of many of our institutions for opium habitués today proclaims all too loudly the evils of such an indiscriminate practice, and though many a medical man has had reason to reproach himself for introducing his patient to the alluring drug, there are, even today, those who, disregarding the magnificent contributions of synthetic chemistry in the last fifteen years, cling tenaciously to papaveris as the ideal pain reliever and sleep producer.

Not so, however, with those who have patiently and studiously sought out an anodyne and hypnotic in whose train did not follow the baneful results that attend long-continued opium administration. We would not banish opium. Far from it. There are times when it becomes our refuge. But we would restrict it to its proper sphere.

In the acute stage of most inflammations, and in the closing painful phases of some few chronic disorders, it is our grandest remedy—our confidential friend. But here, the application must cease : and it is just here that the synthetic products step in to claim their share in the domain of therapy.

Among the latter, perhaps none has met with so grateful a reception as antikamnia, and justly so ; for among all the contributions of pharmaceutic chemistry none so fully merits our confidence as this one, presenting, as it does, the meritorious properties of the other synthetic antipyretics and antineuralgics, without exhibiting their depressing action on the heart.

Its range of application is wide. It is of positive value in certain forms of dysmenorrhea ; it has served me well in the pleuritic pains of advancing pneumonia, and in the arthralgies of acute rheumatism ; on several occasions I have been able to allay with it the lightning, lancinating pains of locomotor ataxia ; but nowhere do I employ it with such confidence as in the neuralgias limited to the area of distribution of the fifth nerve. Here its action is almost specific ; surpassing even the effect of aconite over this nerve.

Given a frontal-temporal-vertical or occipital neuralgia growing out of an uncorrected ocular defect, it will almost invariably arrest the head pain until such times as the ocular trouble can be corrected with glasses. In the terrific fronto-parietal neuralgia of glaucoma, or in rheumatic or post-operative iritis, it is of signal service, contributing much to the comfort of the patient, and I have sometimes thought, exerting an undeniable influence over the ocular disease. In this last group of cases I have seen the most benign effects follow the hourly administration of ten grains of antikamnia until the pain is relieved. It will seldom be necessary to exceed sixty grains of the drug.

According to the statistics of institutions for the treatment of opium addiction, there is no class of invalids from which there have been more opium habitués recruited than chronic neuralgics. If this be so, and the statement proceeds from high authority, the

medical man who uses opium in chronic diseases, save as a dernier resort, is not only indulging in a reprehensible practice, but, reviewed from the standpoint of higher medical ethics, he is criminally careless in employing a dangerous drug when one that has been proven safe will meet the indications equally well.

MYDRIATICS IN REFRACTION.

By RICHARD H. SATTERLEE, M. D.,
Oculist for Buffalo, Rochester & Pittsburg Railway ; Buffalo Railway Company, etc.

WHILE there has been a great advance made in the various departments of medical science—and ophthalmology has been no exception to this rule—still the methods of determining refraction have hardly kept pace with this progress. It is true that we have mydriatics, which act in a much shorter time than the old two weeks' siege of atropia, but why should the oculist still cling to the routine dilatation of the pupil and the paralysed accommodation as a necessary accompaniment of the correction of refractive errors ?

The following are some of the objections to this method :

1. The dilated pupil with a paralysed accommodation is an unnatural condition of the eye. The proof of this is the fact that the patient cannot afterward wear the glass accepted under the influence of the mydriatic.

2. The cornea and lens are frequently perfect in curvature in the immediate vicinity of the normal pupil, while a short distance away they have a greater curvature in one meridian than in another. The dilated pupil would bring out these imperfections that the normal pupil would not.

3. Many people are weeks recovering from the mydriatic.

4. In some cases of beginning glaucoma the increase in tension is slight, and by no means as easily detected as the average text-book would lead one to infer. Any mydriatic in these cases produces permanent injury to the sight.

5. Hyperesthesia of the retina exists in many cases of anemia, hysteria and the like. A large pupil allows still more light to irritate the sensitive retina and greatly increases the discomfort to the patient.

6. In the majority of cases of refraction the mydriatic is unnecessary.

One or two French ophthalmologists, and a few in this country, all that I call to mind who have discarded the routine use of riatics. Hypermetropia, hyperopic astigmatism, hyperopia ciliary spasm simulating myopia—can all be determined without use of a mydriatic. Cases of slight myopia or simple myopic gmatism (.25 D to .75 D) require a mydriatic, but with these exceptions it is not necessary.

Cases have been cited where dilatation of the pupil, kept up several weeks, has relieved various reflex disturbances. A perly adjusted glass would have accomplished the same result out the danger to the retina from this increase of light.

When so much can be accomplished by glasses, should not the advanced scientific and accurate methods be employed for the rmination of refractive errors? A little more careful and cientious work in refraction on the part of oculists would e this department much higher in the list of valuable thera-ics and send the jewelry "expert refractionist," "oculo-opti-," and gentlemen of their caliber, back to mending clocks.

89 DELAWARE AVENUE.

ASTROSTOMY IN THE SEVENTEENTH CENTURY.

BY F. G. MOEHLAU, M. D.,

al instructor in genito-urinary diseases; instructor in physiology, Medical Department, Buffalo University.

OME time ago, an article appeared in several of the papers stating that, in Florence, a man was supposed to have swal-d a table-fork, which statement was greatly doubted. That accidents are not entirely impossible, the following, given by ember of the University of Königsberg in the seventeenth cen-, may be of sufficient proof:

History of the Prussian Knife-swallower. By Dr. David ker:

n the year of our Lord and Saviour Jesus Christ, May 29th, , of the new calendar, a farmer's assistant, A. G., in Gr., situ-seven miles from G., felt nauseated in the morning, and, efore, as he used to force himself to vomit by taking an ordi-knife and, holding it at the tip of the blade, tickling his ynx with the shaft, he did not have the wished-for result, , by pushing the knife further down he lost hold of the tip swallowed it, causing considerable pain before reaching the

stomach. He then tried to force back the knife by standing upon his head at intervals. Not being successful in this way, he then drank a gallon of beer and repeated the manoeuvers as before, but with no success. The fear of the knife cutting through the tissues of the stomach must have been intense, yet the poor fellow continued doing his usual work.

After this had been talked about in the surrounding country, the burgomaster heard of it and ordered him to the Rathaus, inquiring into his condition. The burgomaster referred his case to the medical profession of Königsberg, asking for advice in the difficult matter. The reply given was with small encouragement, as such an accident had happened but once before, in Prague; all historians knew of no other like it.

At Prague, also, a man had swallowed a knife accidentally, and it was taken out again by an artificial cut or opening from the stomach. Therefore, the Königsberg council advised the sending of the sufferer to a conference of the whole medical faculty to decide upon the case, and the result was soon made known by a knighted person to other physicians.

The patient was sent to me, continues the writer, I being dean of the medical faculty at the time. Others also questioned the patient closely in order to understand the whole condition, as I have related before. Upon the advice of the gentlemen, I called a consultation and invited the profession generally. Each one gave his opinion and spoke freely on the subject. Finally we decided that the knife in the stomach must be taken out by an incision, and it seemed necessary to have such work done before the dog-days, and also that the patient should take some balsamic oils, and because the magnetic plaster assisted in the cure of the knife-swallower in Prague it necessarily ought to be tried on our patient. It seemed, finally, that in the cure the Spanish balsam should be employed. To order the surgeon and all necessary for the difficult operation was left to Magister Kruegero.

After the bowels had been emptied by a mild purgative and the balsam given for several days the operation was set for the 9th of July and the work entrusted into the hands of Daniel Schwaben, who is a stone and wound surgeon. As now the external and internal heart tonics, made of pearl water and the like, and other necessary things, were at hand, the beginning of the prayer was made and to God, the Almighty, the most eminent physician and director prayed for success and good progress.

Then the poor victim was tied to a board, the part where the ion should be made marked with charcoal. This was on the side under the short ribs, two fingers in length. There was , the flesh, then the peritoneum, wherein the intestines are ted, to be opened in succession. It was now seen the patient an empty stomach, that it could not be reached at once, so he refreshed with pearl water; but the Lord God had mercy and he stomach was drawn up with a bent needle the surgeon ed the point of the knife. On this spot the stomach was ed, the knife seized and extracted and wonder it was, the nt exclaimed: "That is my knife!" Soon the patient was sed, placed in bed, the wound cleaned and closed with five nes, but so that some of the balsam could be dropped in; also peas or turundas immersed in balsam were placed between titches. Finally, a cataplasm was applied of bolo, white of and a little alum to keep away the heat. The same day the nt had to be satisfied with a little strengthening soup. At o'clock he took some of following powders in pearl water d with cinnamon water:

℞ Nutmeg.....2 ozs.
Stone of crawfish (crawfish eyes).....3½ ozs.
Powdered pearls.....16 grs.
.—Stomach and heart powders.

Thus prescribed for the patient he soon recovered, got married lived happy.

This report, with a knife, is originally in the library of Königs- . The table knife measures seven inches in length; the blade e inch wide.

NOTE ON POSTERIOR NASAL TAMPON.

By JOHN T. PITKIN, M. D., Buffalo, N. Y.

OR the arrest of severe epistaxis by a posterior nasal tampon, on account of its simplicity of performance and absolute ts obtainable therefrom, I would solicit the reader's attention y *modus operandi.*

With the patient seated, preferably in a stiff-back chair, insert end of a small-sized elastic rubber tube with a strong silk cord ng through its lumen (tube should be from two and a half to e feet long), into the bleeding nostril. When from three to five es have been thus introduced, instruct the patient to make

repeated forced expiratory efforts through the mouth, *i. e.*, cough, while the operator continues the slow introduction of more tubing *via* nares. In a few moments the distal end of the tube, with its contained cord, will be extruded from the buccal cavity. Should vomiting intervene, although otherwise by no means desirable, nevertheless it would accomplish the same desideratum. Now, if a medicated cotton tampon is securely fastened to the mouth end of the cord, and gentle traction made upon its nasal extremity, the tampon will be drawn to the position desired in the posterior nares. The rubber tube can then be slipped off of the cord, which, with the pledget of cotton, will be left *in situ*.

Society Proceedings.

MEDICAL ASSOCIATION OF CENTRAL NEW YORK.

THE twenty-eighth annual meeting of the Medical Association of Central New York was held in the assembly-room of the Yates hotel, in the city of Syracuse, N. Y., Tuesday, October 15, 1895.

The association was called to order at eleven o'clock by the president, Dr. FLOYD S. CREGO, of Buffalo. The reading of the minutes of last meeting was dispensed with, and, upon motion, they were approved as printed in the proceedings.

The PRESIDENT then announced the following committees:

Credentials—Drs. A. A. Young, of Wayne; S. F. Snow, of Onondaga; H. T. Carter, of Erie.

Arrangement and Reception—Drs. E. L. Mooney, H. L. Elsner and A. C. Mercer, of Onondaga.

Business—Drs. F. H. Stephenson, of Onondaga; A. L. Beahan, of Ontario; John Gerin, of Cayuga.

The publication committee reported that the arrangement with the BUFFALO MEDICAL JOURNAL for publishing the transactions had proven satisfactory, and that a copy of the volume containing the minutes, papers and discussions of the last meeting had been sent to each member who had paid the annual dues. It had been deemed best not to publish the revised constitution and list of members during the past year, but the committee advised that this be done during the current year.

report was accepted and the publication committee was to publish the revised constitution and list of members, l a copy to each member.

SECRETARY read a list of delegates who had registered at ting in Buffalo last year who by attendance at the meeting r were entitled to membership.

vice-president, Dr. W. S. CHEESMAN, of Cayuga, then took r while the president, Dr. FLOYD S. CREGO, delivered the ddress.

n motion, a vote of thanks was extended by the association resident for his excellent address.

STEPHENSON, as chairman of the business committee, then ed that twenty minutes would be allowed for each paper, ne discussions were prolonged, in which case the president educe later the time allotted.

ers were then read as follows: 1. Fracture of the greater ty of the humerus—frequency, cause, complication, diag- eatment and result, with report of a case, by Dr. A. L. Fair Haven, N. Y.; discussed by Dr. Jacobson, of Syra- . Aural, nasal and laryngeal tuberculosis—with special e to the Adirondacks as a winter health resort, by Dr. F. Snow, of Syracuse, N. Y.; discussed by Drs. Halstead, g, Elsner, Herriman and the president. 3. Some observa- general paresis, by Dr. F. H. Stephenson, of Syracuse, 4. Report of a case of appendicitis without preceding pain , by Dr. S. L. Elsner, of Rochester, N. Y., which was later d by Drs. Cheesman, Jacobson, Baker, Miller and S. L.

SECRETARY then announced the following list of delegates d complied with the requirements of the by-laws, and heir election to permanent membership: Drs. Henry T. of Erie; B. C. Loveland, Alfred M. Mead and C. O. Jack- Ontario; Eugene H. Carpenter, of Madison; T. Oliver enry H. Covell, John Zimmer, Charles A. Vanderbeek and Volff, of Monroe. Carried.

BACON, of Oswego county, offered the following resolution:

ved, That it is the sense of the association that the insuring of of children under ten years of age, as at present conducted, is public policy.

we recommend to our law makers to pass a law that shall pro- ractice in this country that has proved so dangerous in other the world.

Upon motion the resolution was referred to a committee to report after luncheon.

The PRESIDENT appointed Drs. C. C. Bacon, of Oswego, Charles A. Vanderbeek, of Monroe, and J. P. Creveling, of Cayuga, as such committee.

The meeting was then adjourned to 2 o'clock P. M., and luncheon was served in the dining-room of the Yates hotel by the invitation of the Onondaga County Medical Society.

The association reassembled at 2.30 o'clock. The committee appointed to consider the resolution offered by Dr. Bacon desired an extension of time, and upon motion the committee was instructed to report at the next annual meeting.

The report of the TREASURER was read and showed a balance on hand of $182.05.

The SECRETARY announced that he had some copies of the transactions left over from last year, and it had been decided to let the members and delegates have them at cost price, fifty cents a copy. They could be obtained upon application to the secretary.

The election of officers for the ensuing year resulted as follows: President, Dr. William S. Cheesman, of Auburn; first vice-president, Dr. Edward B. Angell, of Rochester; second vice-president, Dr. E. L. Mooney, of Syracuse; secretary, Dr. Charles A. Vanderbeek, of Rochester; treasurer, Dr. S. L. Elsner, of Rochester.

The SECRETARY presented his bill for printing and other expense items, amounting to $43.15, which was ordered paid.

Secretary announced the following visitors: B. W. Loomis, of Syracuse; E. B. Mervin, of Camillus; H. D. Mervin, of Cicero; S. H. Levy and C. F. Wright, of Syracuse; F. F. Cooley, of Oswego; N. Wilbur, of Fayetteville; E. W. Belknap, C. N. Daman and C. E. McClary, of Syracuse; C. E. Heaton, of Baldwinsville; Charles E. Weidman, of Marcellus; A. W. Scott, of Bridgeport; Irving M. Snow and F. C. Busch, of Buffalo.

The PRESIDENT then appointed the following committee on publication for the ensuing year: Drs. E. B. Angell and Charles A. Vanderbeek, of Monroe and Dr. William C. Krauss, of Erie.

The following papers were then read: 5. Demonstration of landmarks of stomach, liver and the like, by auscultatory percussion, by Dr. A. L. Benedict, of Buffalo. 6. Localised peritonitis, by Dr. C. O. Baker, of Auburn, N. Y. 7. Treatment of ileo-colitis in the Buffalo Fresh Air Hospital, by Dr. Irving M. Snow,

lo. 8. A pseudencephalic monster, with exhibition of n, by Dr. Wm. L. Conklin, of Rochester, N. Y. 9. The of diseased conditions of the nose and throat to malnutri- Dr. John O. Roe, of Rochester, N. Y.; discussed by Drs. idama, Loveland and Roe.

following papers were read by title: 10. Concerning the of cases, by Dr. Lucien Howe, of Buffalo, N. Y. 11. catarrh of the intestinal tract, by Dr. A. A. Young, of , N. Y. 12. Exophthalmic goitre, by Dr. W. C. Krauss, of N. Y.

following papers were then read: 13. Vaginal celiotomy, Wm. B. Jones, of Rochester, N. Y.; discussed by Dr. of Syracuse. 14. The relation between the specific gravity lood and its hemoglobin percentage, by Mr. A. T. Kerr, Buffalo, N. Y.

A. A. YOUNG moved that in view of the excellent enter- t by the Onondaga County Medical Society we tender them f thanks. Carried.

SIDENT CREGO: It is the unanimous sentiment of the that we have been royally entertained.

committee of arrangements was then authorized to draw e treasurer for extraordinary expenses to the amount of necessary.

association then adjourned to meet at Rochester, the third y in October, 1896.

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rogress in Medical Science.

LARYNGOLOGY.

REPORTED BY HENRY J. MULFORD, M. D., Buffalo, N. Y.,
structor in diseases of the nose and throat at the Medical Department of Buffalo University.

SURGICAL TREATMENT OF LARYNGEAL TUBERCULOSIS.

f papers read, with discussion, at the seventh annual summer meeting of the British Laryngological, Rhinological and Otological Association, 1895.

(*Journal Laryngology, Rhinology and Otology.*)

F. H. KRAUSE, Berlin, thinks the surgical treatment of ryngeal tuberculosis will be resolved favorably. It is as ble to remove tubercular tissue from the larynx as it is to it from any other situation. All cases may be helped. It

is our duty to give ease to a patient by any means in our power. He quotes a case: "A woman in advanced pulmonary and laryngeal phthisis; diffused infiltration and ulcerative destruction of almost entire laryngeal membrane; enormous swelling of ary-epiglottic and pharyngo-epiglottic folds made swallowing impossible. Considerable pieces were cut from both folds, enabling her to swallow. Up to the time of her death there was no more trouble from the larynx."

In operating, it is necessary to remove all diseased tissue. No part of the larynx need be avoided. As a rule, the tissue cicatrises well. The healing process is hastened by application of lactic acid after operating. Patients bear the operation well. Many cases quickly relapse, but many cures have been made, lasting till death from the pulmonary condition.

Dr. Theodor Hebyng: (1) Tubercle of the larynx can heal by itself without local treatment. (2) The chief indications in treatment are hygienic, dietetic and climatic. (3) The first important indication is removal of dysphagia. (4) The second is symptoms of stenosis. (5) The third relates to recovery of voice. (6) The healing of deep ulcers of the larynx is effected quickest by scraping or removal of tubercular tissue. (7) Surgical measures are indicated in most cases of recent origin; (8) contraindicated in advanced cases. (9) Under cocaine the operation is painless. (10) One to 2 per cent. solution of pyoktanin is valuable in preventing inflammation after operation, applied twice daily. (11) Recurrence is frequent. (12) Nearly the whole of the upper larynx is accessible. (13) Operation does not affect a radical cure. (14) Success depends upon the character of the local affection, the patient, condition of lungs, thoroughness of operation, skill of operator and careful after-treatment. (15) Prognosis is difficult. (16) Serious bleeding rare. (17) Nonsuccess because treated too late. (18) This treatment demands the closest attention to detail, careful attention to after-treatment and observation over a long period. (19) Bad cases should be treated in climatic establishments. (20) The power of absorption in severe infiltrations, also the likelihood of healing of extensive ulcerations of larynx, with restoration of voice, has been proved to exist by anatomical and microscopic preparations as well as by clinical observation.

Dr. J. W. Gleitsmann, New York: Curettement of the larynx has not received the attention in the United States that it has in Europe. Two reasons for this: the measure is thought too harsh

ne; others think the small percentage of cures does not ts usefulness. Curettement an important measure; should l only on selected cases. It is not claimed that curettement re a concomitant pulmonary complication, nor can relapses ented. But if curettement improves or cures the laryngeal the patient will be in better condition to fight other compli- . Reports results in twelve cases: three dead; five, no ement; four are without recurrence from six to ten months. ns one case cured by him seven years ago, by using curette, o-cautery and lactic acid. Had primary tuberculosis of x and larynx; after five months' energetic treatment the ons healed. Except slight relapse the following winter, is well today.

Lennox Browne mentions a case operated on by him in ill living. There was such pain in swallowing, patient said she ooner die by starvation than swallow. Extensive faucial yngeal ulceration. Under curetting and lactic acid com- covery; lungs improved too. Has found so much benefit urettement and lactic acid that he endorses the treatment. ks lactic acid is of no service without first curetting.

Luc has had an experience of six years with this treatment. rare, but relief follows in nearly every case. The greatest is in those cases having great swelling of arytenoid region. l two cases of obstinate hemorrhage after cutting the epi- As a local application has used phenol sulphuricinate ely with good results.

Law: Good climatic conditions necessary to success. Hard a suitable resort where special treatment may be had. ns a case whose larynx he curetted; after-treatment, lactic worse at end of ten days. Sent her to the Riviera, after ing patient how to apply the lactic acid to her own larynx. erfectly healed after eight weeks.

Delavan, New York, came to Berlin doubting the value of l procedures in tuberculosis of the larynx. After seeing or Krause operate has a different idea as to its value. Is it is a valuable measure. Success depends upon the tech- eing observed with refined skill and with a high degree of n, accuracy and care.

Heryng: Edema present disappears rapidly after operation. atients are so sensitive to laryngeal interference that to use

a weak solution of lactic acid is to cause edema of infiltrated parts. As a rule, wounds made by the curette heal readily when the edges are not lacerated; they scarcely give rise to acute inflammation of the parts. To avoid infection of the wound paint with a 1 to 2 per cent. solution of pyoktanin.

Dr. MACKENZIE, Baltimore, thinks it established that laryngeal tuberculosis can be cured by intralaryngeal surgery, even if there be tuberculosis at other points. Does not advise operation where there may be very diffuse infiltration with ulceration. External operations of little value. Not justifiable until intralaryngeal methods fail; nor is the latter justifiable where there is very extensive disease of the larynx with grave lesions of the lungs or extensive tuberculosis elsewhere. Such patients die in spite of all treatment.

Prof. KRAUSE, in closing, said: I have particularly stated in my paper that I do not claim to cure these cases, but to relieve them. To relieve our patients is, according to my mind, one of the greatest works of our art. I do not recommend the treatment for general use, but we *must* do our duty in relieving the patient.

EUROPEAN OPINION REGARDING THE USE OF ANTITOXIN IN DIPHTHERIA.

ON THE results of Heilserum therapy (discussion before the Thirteenth Congress for Internal Medicine, in Berlin): HEUBNER, Berlin: Of 1,332 cases treated without serum, 38.3 per cent. died; of 1,390 with serum, 19.1 per cent. died. A difference in the clinical process under serum cannot be determined. In 19 per cent. an exanthema followed injection, combined sometimes with fever and pain in joints. He favors serum treatment. BAGINSKY, Berlin: Mortality in Kaiser Friedrich's Hospital in years 1890 to 1894, 41 per cent.; of 525 cases treated with serum it was 15.81 per cent. Mortality of tracheotomies in other years, 59 per cent.; now, 38 per cent. Heart affections not influenced by serum treatment. Considers serum treatment the best and that the concomitant effects are of no moment. RAUKE, Munich: Mortality in the last year at the Münchener Hospital was 57 per cent.; during antitoxin period, 21 per cent. Of 96 cases of primary diphtheria, 63 had laryngo-stenotic symptoms; in 33 per cent. the stenosis disappeared after injection. In other epidemics it disappeared in only 5 per cent. Of intubated cases, 30.9 per cent. died; in other

ics, 69 to 73 per cent. Exanthemata are without signifi- considering the great effects of the treatment. SEITZ, h, had studied the complications observed before the use of ; thinks the kidney complications are not more frequent serum. Exanthemata more frequent, but of no significance. NIG, Jena, reports 59 cases treated with serum; 20 per cent. WIEDERHOFER, Vienna, recommends antitoxin emphatically. PEL, Freiburg-i-Br., reports experiments on animals, which antitoxin produces, at times, transitory albuminuria, but that no harmful effects on the organism. SIEGERT, Strasburg, albuminuria in 14 per cent.; in cases treated with antitoxin, cent. VIERORDT, Heidelberg: Nature of the disease dif- in the various epidemics, and that, therefore, it is difficult n a certain judgment on the effects of treatment. HEUBNER des that all authors have established that serum can be l without any damage, that the mortality is diminished, and herefore, further application of it is indicated.

erapeutics of diphtheria, with special reference to antitoxin. ssion before the British Laryngo- Rhino- and Otological ation; seventh annual summer meeting, July, 1895.) Dr. s WOODHEAD had had a large laboratory experience with tin, and has examined nearly 5,000 specimens, from over ases of diphtheria, during the past eight or nine months. ll confidence in the future of antitoxin. Very valuable in tages; less so in later stages when nerve and muscle lesions ccurred; not good in mixed cases where other poisons are t with the toxins of diphtheria. Is convinced that the serum nless even when injected in large doses. No hesitation in g prophylactic injection. Mr. LENNOX BROWNE: The ation of antitoxin should be carefully selected, as specimens ifferent makers vary. Skin eruptions and joint pains are ly septic. In 100 cases observed by him, 38 per cent. had omplications, while Moizard, of Paris, had only 14 per cent. no improvement over classical remedies in using antitoxin. ity in one London hospital so great under antitoxin that it onger used. There is a tendency under serum treatment to ed kidney pressure. General condition of patient is not ed. Has been impressed by the great anemia persisting in n. Thinks there is some good in the treatment; believes jections are warranted in diseases that have resisted classi- ethods. We are not yet justified in accepting this treat-

ment as specific in diphtheria. Statistics not reliable, because published too hastily. Deaths having occurred under prophylactic injection, we are not justified in using serum as a preventative. Dr. J. MACINTYRE thinks the general opinion is against serum being a specific. If it be true that in the laboratory immunity is thought possible, he hopes that improved methods in preparing and in using serum may make it of greater value. Dr. DE ROALDES: The abandonment of serum by one London hospital is fit for serious thought. He calls attention to report of a medical commission, in New Orleans, appointed to test antitoxin. There was no selection of patients; injected at any stage, under ordinary hygienic conditions. Death-rate did not exceed 8 per cent. in 250 cases. Its use cut the prevailing mortality one-third. Considers antitoxin of great value. Thinks it has come to stay. Mr. DALY is hopeful as to the future of antitoxin, but thinks we cannot afford to burn our bridges behind us in regard to classical methods of treatment. Has used antitoxin, but does not depend on it exclusively.

Dr. WOODHEAD, closing discussion: In taking statistics, it is not fair to any method of treatment to take a few selected cases. The serum treatment does not supply everything desired to overcome diphtheria. Anything in the old method, of service, must be used with the antitoxin. Antitoxin is not a panacea for all cases. In regard to renal changes, in *postmortems* on cases before the antitoxin treatment, a condition of nephritis was always found. This is due to the kidneys attempting to excrete the toxins. It may be pointed out that when albuminuria occurs as a result of the action of toxins on the kidneys that, if the antitoxin is pushed, the albuminuria is lessened; the toxins being so antagonised that they lose their stimulating power on the kidneys. This is now so well recognised that antitoxin is given in large doses to diminish albuminuria.

Discussion on serum treatment (Königlicher Verein der Aerzte in Budapest, March 2, 1895): HOGYES believes that the mortality in diphtheria is so variable that up to now statistics prove that Heilserum has no influence. In experiments upon animals the minimising effect is always applied; in men the curative effect is specially urged. WEISS recommends serum treatment. TAUGL thinks if serum had any effect the subsequent paralyses and nephritis would not occur. PERTIK also believes that statistics do not prove the efficacy of serum; further experiments should be performed.

sz thinks that the favorable statistics are obtained from the stance that now all the milder forms of diphtheria also to the hospitals for treatment. He has observed one case of ence, first attack cured by serum. Three weeks later recur- serum given on first day of disease; but result was death.

STATE MEDICAL EXAMINATIONS.

CONDUCTED BY WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.
Member New York State Medical Examining and Licensing Board.

RSITY OF THE STATE OF NEW YORK MEDICAL EXAMINATIONS.

NATIONS for license to practise medicine in this state will l as follows:

tes.—1896: January 28–31, April 7–10, May 19–22, June

ces.—New York, Albany, Syracuse, Buffalo. Each candi- notified as to exact place.

ily Program.—Tuesday, morning, 9.15—12.15, anatomy; on, 1.15—4.15, physiology and hygiene. Wednesday, morn- 15—12.15, chemistry; afternoon, 1.15—4.15, surgery. ay, morning, 9.15—12.15, obstetrics; afternoon, 1.15—4.15, gy and diagnosis. Friday, morning, 9.15—12.15, thera-

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AL CONFEDERATION OF STATE EXAMINING AND LICENSING BOARDS.

REPORT OF THE COMMITTEE ON ORGANISATION.

Members of the State Medical Examining and Licensing oards.

THE fourth annual session of the Conference, held at Balti- nore, Md., May 9, 1895, the discussions clearly indicated a g sentiment on the part of the medical profession through- country in favor of the adoption of state examinations, as g the only effective barrier against the entrance into the on of large numbers of ignorant and incompetent practi- It also became apparent that the time had fully come for blishment of an effective central organisation to serve as ium of communication between the several states, which e made essentially serviceable in promoting the work of

securing more nearly uniform standards of medical learning throughout the whole country.

The sentiments expressed at the meeting, concisely stated, are embodied in the following propositions :

1. That as the system of state medical licensure has been adopted in a number of states and there being a decided probability that a system of some form of state control will eventually be adopted by all the states, it is necessary that the several state examining boards should at once take measures for approximating, as nearly as possible, substantial uniformity as to ratings and standards of acquirements.

2. That there should be established at once a system of reciprocal interstate action on the part of the state examining boards, permitting the licentiate of one board to acquire a legal status under the jurisdiction of the board of another state without reëxamination, should he move from the one state to the other.

3. That measures be instituted at once for largely increasing the powers and influence of the National Conference by which it may be placed more nearly in touch with the members and representatives of state examining boards, as the most available and immediately effective means by which these desirable ends can be reached.

In order to prepare the way for carrying out these purposes a committee on organisation was appointed to draft a form of constitution or code of rules for the government of the National Conference and to outline a plan for defining its work and increasing its usefulness ; the committee to report at the next annual meeting.

The work of the National Conference is, of necessity, largely advisory and suggestive rather than mandatory ; hence its laws, while providing for an effective organisation, should be sufficiently elastic to meet the requirements of widely differing conditions. They should be framed to be helpful to all ; at the same time, if the reciprocity so greatly desired is to be accomplished through the good services of the organisation, as a species of "clearing house," there will be the need of rigidly just conditions. Hence a plan is suggested to accomplish this end, which we hope will be carefully considered by you ; we are not sure that it is best, or even feasible, to adopt this at this time. The question is, however, so important that we feel it our duty to present it to you as a suggestion.

ne accompanying proposed form of a code of rules embodies, believed, the groundwork of an organisation of sufficient th and scope to meet the present demands. It is presented ively for inspection and criticism. And in this, the members e committee invoke the active coöperation of the members of e state boards of examiners, either collectively, as a board, or lividuals. They desire an expression of opinion regarding roposed form and solicit such suggestions and criticisms as eem pertinent and of practical utility.

is but right to add that Dr. W. W. Potter, who was appointed committee, requested Dr. William Perry Watson, of Jersey to serve in his stead; this Dr. Watson consented to do, but . Potter was freely consulted at the request of the other ers of the committee, he has also signed this report.

CONSTITUTION.

HEREAS, the action in many of the states in requiring a state e before entering on the practice of medicine makes it emi- desirable that the qualifications for licensure be fairly lent in the various states and that, eventually, by a system iprocity, a physician licensed by any one board may obtain rivilege of practising under the jurisdiction of any other by the proper certification of the license, without a new nation, a closer affiliation of the various examining and ng boards becomes a necessity.

ARTICLE I.—NAME.

is body shall be known as the (National) Confederation of Medical Examining and Licensing Boards.

ARTICLE II.—OBJECTS.

e Confederation has for its objects:

A conference of the medical examiners of the various state for mutual aid and counsel and for a comparison and dis- n of the methods employed.

The collection, compilation and dissemination of informa- egarding state licensure in medicine and of methods for its ng.

If at any time it may seem desirable, the adoption of regu- for the guidance of the operations of the confederating .

Or, The formulation of rulings, advisory in their nature, dicating the conclusions of the Confederation.

ARTICLE III.—MEMBERS.

SECTION 1. Any member of any examining or licensing board of any state or territory is eligible to membership while he continues a member of the board, upon presenting proper evidence of his position to the council of the Confederation, and, unless elected to membership as prescribed by this constitution, the membership will cease when he ceases to be a member of the board of examiners.

§2. Physicians, not members of an examining or licensing board, may, upon application to the council, be nominated by it to the Confederation and be elected to membership by a two-thirds vote of the members present at any meeting.

§3. The members shall have equal rights and privileges (excepting in voting for the regulations).

ARTICLE IV.—REGULATIONS.

SECTION 1. As the regulations are to be rules governing the concerted action of the confederating boards, they can be only adopted by a vote of the boards themselves.

§2. Each state shall have but one vote in voting for the regulations and the person delegated to cast the vote for any state shall be communicated by the various boards to the secretary of the Confederation, at or before any meeting at which a regulation is to be acted upon.

§3. Unless all the boards having membership in the Confederation give consent, no regulation shall be acted upon at the meeting at which it is proposed; but it shall lie over until the next meeting and be published in the notice of the meeting.

§4. If any provision of any proposed regulation cannot be adopted by any of the confederating boards, because of the limitations of the state enactment creating the board, it must be amended before it is voted for, upon presentation of the facts by the board affected.

§5. A vote of two-thirds of the boards having membership in the Confederation is necessary for the adoption or repeal of any regulation. Or,

ARTICLE IV.—RULINGS.

SECTION 1. The Confederation shall, whenever requested by two or more boards of examiners, express an opinion on the proper procedure, standard or rating for a fair equivalence of requirements; these shall be known as rulings.

§2. These rulings, while advisory in character, are to be xpressive of the judgment of the Confederation and should e accepted by each board in affiliation with the Confederation far as the enactments creating them will permit.

ARTICLE V.—OFFICERS.

CTION 1. The officers of the Confederation shall be a presi- who shall deliver an address at the annual meeting, two esidents and a secretary, who shall act as treasurer. The shall be elected at the annual meeting, shall hold office for ar and until their successors are elected. They shall per- he duties usually pertaining to these positions and shall be, io, members of the council.

There shall be elected at each meeting, at the time the are elected, 5 (7) of the members, who, with the officers, onstitute the council. The council shall have charge of the of the Confederation between the meetings; shall prepare esent annually to the Confederation a list of the members examining boards of the various states, together with the the termination of the service of each; shall receive and e all applications for membership, nominating to the Con- ion such, as in their opinion, should be admitted to the eration. It shall also order and audit all expenditures; extraordinary assessments when they are deemed neces- nake preparations for the meetings; supervise the working regulations (rulings) and carry into effect conclusions or endations of the Confederation, making provision for the publication of all of the transactions that it is desirable to . All complaints or charges must be referred to the coun- hout debate and, in like manner, any resolution or new s whatever, unless it is entertained by unanimous consent. iness referred to it must be reported back to the Confedera- the same meeting, unless it is specifically instructed to the y. It shall make rules for its own government and make ual report to the Confederation.

ARTICLE VI.—MEETINGS.

confederation shall hold one meeting annually at such d place as the council may select, but additional meetings cific purposes may be called by the council if it shall be necessary; at least two weeks' notice must be given of any meeting and the business to be transacted specified in the the meeting.

ARTICLE VII.—FUNDS.

SECTION 1. Each state board represented in the Confederation shall pay an annual fee of $10 into the treasury and shall be debarred from the privileges of the Confederation when in arrears. In consideration of this fee, the members of the boards so contributing shall be exempt from the payment of the regular dues.

§2. Except as provided in Section 1, the members of the Confederation shall pay an annual fee of $1.00 into the treasury and no one shall have the privilege of registering at any meeting until all arrearages are paid.

§3. If at any time it may be necessary, the Confederation, upon recommendation of the council, may impose an extra assessment, which shall be levied on all members alike.

ARTICLE VIII.—QUORUM.

Five members shall be a quorum to transact business, except on a vote on a regulation, but the board of examiners of any state may transmit to the secretary of the Confederation its vote on any regulation; this vote shall be received the same as if cast by a member of the board present at the meeting.

ARTICLE IX.—AMENDMENTS.

Amendments to the constitution must be submitted in writing to the council at least thirty days before the meeting, be advertised in a notice of the meeting and adopted by a two-thirds vote of the members present; provided, any state board of examiners shall have the privilege of transmitting its vote to the secretary of the Confederation, which shall be received the same as if it were cast by a member present at the meeting; but this privilege is not accorded to any board represented by any of its members at the meeting.

THE COMMITTEE OF ORGANISATION.

NEW MEXICO TERRITORIAL BOARD OF MEDICAL EXAMINERS.

IN THE territory of New Mexico the territorial board of health exercises the functions of the board of medical examiners.

In 1882, there was adopted by the legislature of New Mexico, and approved, a statute regulating the practice of medicine, its details resembling the then existing statute of Illinois. But, being unsatisfactory to the medical profession and adversely criticised by the bar, various futile efforts were made by the New Mexico Medical Society to secure a better statute. In September, 1894, the territorial board of medical examiners, in session at Albu-

ıe, appointed a committee of three of its members, who, he president of the board and the president of the New o Medical Society, should prepare a bill looking to a better e. In January, 1895, such a bill was ready and, having met proval of a majority of the board, and of the officers of the lexico Medical Society, was presented to the legislature then ion. It became a law, but in its passage received several essary alterations. An attempt was made in drafting this utilise the best materials from kindred statutes throughout ited States, as well as our own considerable experience.

e following-named physicians comprise the membership board for 1895: W. R. Tipton, M. D., president, Las ; G. S. Easterday, M. D., vice-president, Albuquerque; s H. Atkins, M. D., secretary, East Las Vegas; J. H. Sloan, Treasurer, Santa Fe; Wm. Eggert, M. D., Santa Fe; J. J. , M. D., Raton; J. M. Cunningham, M. D., East Las Vegas.

THE OREGON MEDICAL PRACTICE LAW.

egislative assembly of the State of Oregon, in its 1895 ses- assed a new law for the regulation of the practice of medi- nd surgery, which, in some of its features, is of more than nterest. Among other things, it provides that the Governor ppoint five persons from among the most competent physi- f the state, all of whom shall have been residents of the or seven years and of at least five years' practical experience r profession, who shall be known as the Board of Examiners e State of Oregon. Three of the board shall be regulars, clectic" and one "homeopathist." The full term of office years. The board is required to hold meetings for exami- on the first Tuesday of January and July of each year, at nd, and it may call special meetings when in the opinion of rity of the members it is deemed necessary.

aminations shall be in anatomy, physiology, chemistry, a medica, therapeutics, practice of medicine, surgery, obstet- liseases of women, medical jurisprudence and such other es as the board shall deem advisable. They must be both fic and practical, and of sufficient severity to test the candi- fitness to practise medicine and surgery. They may be n or printed, or partly printed and partly printed, questions swers.

The board may refuse or revoke a license for unprofessional or dishonorable conduct, subject, however, to the right of the applicant to appeal from the decision of the board to the circuit court. And before a license can be revoked, a complaint of some person under oath must be filed in the office of the secretary of the board, charging the acts complained of; the accused must be served with a written notice and copy of such complaint; a time and place for hearing thereon appointed, and stated in the notice, and the accused be given an opportunity to appear and defend himself, personally and by counsel, have the sworn testimony of witnesses taken and present other evidence in his behalf.

The words "unprofessional" or "dishonorable conduct," are declared to mean (1) the procuring or abetting in procuring a criminal abortion; (2) the employing of what are popularly known as "cappers" or "steerers;" (3) the obtaining of any fee on the assurance that a manifestly incurable disease can be permanently cured; (4) the wilfully betraying of a professional secret; (5) all advertising of medical business in which untruthful and improbable statements are made; (6) all advertising of any medicines, or of any means whereby the monthly periods of women can be regulated, or the menses reëstablished if suppressed; (7) conviction of any offense involving moral turpitude; (8) habitual intemperance.

The person receiving a license shall file the same, or a copy thereof, with the county clerk of the county wherein he resides, and in case he shall move into another county, he shall procure from the county clerk a certified copy of such license and file the same with the county clerk in the county to which he removes.

The penalty for practising medicine or surgery without a license, or contrary to the law, is a fine of not less than $50 or more than $100, or imprisonment in the county jail not less than ten nor more than ninety days, or both such fine and imprisonment. All fines are to be paid into the state treasury for the use and benefit of the common schools.

Any person shall be regarded as practising medicine within the meaning of this act who shall append the letters "M. D." or "M. B." to his or her name, or, for a fee, prescribe, direct or recommend for the use of any person, any drug or medicine or agency for the treatment, care or relief of any wound, fracture, or bodily injury, infirmity or disease; provided, however, the act shall not apply to dentists in the practice of their dental profession. —*Jour. Am. Med. Assn.*

BLIC HEALTH, HYGIENE AND BACTERIOLOGY.

Conducted by ERNEST WENDE, M. D.,
Health Commissioner of the City of Buffalo, N. Y.

October Health in Buffalo.

By FRANKLIN C. GRAM, Registrar of Vital Statistics.

ERE was no material change in the city's death-rate for October from that of the previous month, although there ite a difference between this and the same months of several previous. Consumption claimed the greatest number of s—namely, 34, as against 42 for the same month last year. omes pneumonia with 27, as against 20 last year. A synop- the principal communicable diseases in which physicians are ted is presented in the following table :

	Tubercu- losis.	Enteric Fever.	Diphthe- ria.	Diphtheritic Croup.	Membranous Croup.	Scarlet Fever.	Measles.	Pertussis.
orted, Oct., 1895..	41	71	97	8	10	25	2	1
Oct., 1895.....	34	20	23	1	9	3	0	1
orted, Oct., 1894..	0	80	63	1	5	65	4	2
Oct., 1894.....	42	22	27	7	8	2	0	0
Oct., 1893	41	13	16	3	9	9	1	5
Oct., 1892.....	42	42	30	0	0	12	1	3
Oct., 1891.....	41	39	19	0	0	11	1	2

nsumption was not reported in 1894. The apparent inaccu- n 1894, between the cases of diphtheritic and membranous reported and the number of deaths is accounted for in sev- ays. Some physicians, at that time, claimed to be unaware ese diseases should be reported to this department.

e deaths, and rate per thousand, for the month of October, s and the past four years are as follows : 1895, deaths 394, .08 ; 1894, deaths 440, rate 16.76 ; 1893, deaths 480, rate 1892, deaths 464, rate 19.53 ; 1891, deaths 451, rate 21.22. gh the population has gradually increased, yet the death- steadily decreasing.

ere were 716 births and 262 marriages during October, 1895. emarkable how the number of premature and still-births p, the former being 28 and the latter 33.

ONG (*Medical Record*) gives the following hints for the use of in fevers : 1. If the tongue becomes dry, discontinue ; if mois- ntinue. 2. If the pulse becomes quicker it does harm ; if slower, 3. If the skin becomes moister, good is being done. 4. If the ng becomes easier continue its administration.

Correspondence.

CRIMINAL RESPONSIBILITY.

Editor Buffalo Medical Journal:

SIR—My attention has been called to Dr. Putnam's very clearly stated paper on The Criminal Plea of Irresponsibility, in the November number of the JOURNAL. The attempt to mark out boundary lines of responsibility in crime, and determine where the law should punish and where it should excuse, always ends in confusion and obscuration of the real facts. Questions of criminal responsibility are very largely theories and personal opinions, hence the difference of opinions. This is to be expected from judges and lawyers, but reflects sadly on the physician, who should have the special training, and certainly has the facilities, for ascertaining the facts and conditions from which criminality springs. No theories of courts or legal definitions of insanity should have any influence with physicians, unless founded on tangible facts that can be sustained by evidence accessible to every medical man. Many good physicians still cling to the medieval conceptions that crime and insanity has a moral basis which can be reached by exorcism, physical punishment and the infliction of pain to the higher mentality, rousing it to greater control of the lower. Along the line of such theories originate the struggle to find some conditions or mental states which are to be treated by punishment and otherwise. It is always sad to hear physicians refer to the decisions of judges and the findings of jurors in certain cases, as if they were absolute truths and conclusions of the highest wisdom and science. In reality, along lines of mental disease and questions of science, they are not unfrequently the most stupid blunders and misconceptions. All medical men, familiar with the facts of mental disease, find such wide departures from the truth in theories and rulings of the law as to make agreement impossible. Dr. Putnam's suggestion, that I have asserted that one glass of spirits would produce a permanent impression on the brain, and that anyone who had ever taken alcohol was not responsible, is such an extreme statement as to require no denial. I am pleased to say that for many years I have urged the irresponsibility of criminal inebriates, entirely from a clinical and physical point of

It is no statement of theory, but a question of facts and eaning. I have never seen an inebriate criminal who was ering from disease which could be defined and traced as as any other form of insanity. My observations and con- have been confirmed by an ever-increasing number of nedical men, both at home and abroad. The question is one of facts. If inebriety, or drunkenness, or states of tion are not insanities in the broadest sense, what are they? at is the physical condition of the brain in respect to the for healthy functional activity in these states? Is it pos- r anyone to repeatedly, or at intervals, paralise the brain vous system with alcohol, and be of sound and healthy Let the answer to this come from a scientific study of ot from theories or opinions of courts and judges.

present rulings of the law and courts fail, to a large to represent the advances of science, and in many instances asly fail in the punishment of inebriates who commit crime, ctically and ethically, and follow lines of precedent built up on theories that are contradicted flatly by an ever-increas- y of facts. As physicians we can have no quarrel with but, when it becomes an interpreter of science, we should that it recognise the facts above all theories or opinions. nger is along the line of theories and assumption. The man should be a gleaner and interpreter of facts alone, no what the relation these facts may have to law, or theory or pinion. If inebriates are irresponsible legally, this fact can possible danger to society or civilisation. It is the theories ors of the criminal responsibility of inebriates, which are orted by facts, that are dangerous. It is the personal equa- nd theoretical conceptions of inebriety which appear in conclusions that are to be feared. We need a thorough f cases, above all theories, to determine the questions of tability and irresponsibility in criminal inebriates. Until this , there will be difference of opinion and confusion of practice.

TFORD, CONN. T. D. CROTHERS, M. D.

THREE CHILDREN AT ONE BIRTH.

Buffalo Medical Journal:

—The following account of three children at a birth may nteresting on account of its infrequency:

tober 20, 1895, I was called to attend Mrs. R. in her fourth

labor. Her abdominal distention was greater than is usual, bu was not so markedly increased as to suggest what was to follow Labor pains were constant all day, but the contractions lacked tha propulsive character so often observed, no doubt due to over-dis tention of the uterus. The head presented in first position, an although the os was widely dilated, the uterine contractions were s feeble that natural delivery appeared impossible, so applying th forceps I delivered her of a boy. After cutting the cord I waited as is my custom, for the placenta to be expelled, making pressur over the fundus. After waiting half an hour with the pains prac tically absent, I introduced my hand to deliver the placenta, whe I felt the feet of another child through its amniotic sac. By trac tion on the feet I aided the descent of a second child, ruptured th membranes, and pains still being absent, I delivered the woman wit what assistance she could give by voluntarily compressing th abdominal muscles.

After again waiting twenty minutes and making pressur through the abdomen as before, I introduced my hand into th uterus again and encountered through the walls of a third sac th breech of a third child. This also was delivered largely by th voluntary bearing down of the mother, though the uterine contrac tions seemed at the time to increase in power. The child's bac was anterior. Within fifteen minutes of the birth of the last child the uterus emptied itself. There were three sacs and three distinc placentas. There was neither subsequent hemorrhage nor rise o temperature, and the mother got up on the ninth day after labo The first and second children were boys, the third a girl. Whe two days old the girl weighed four and one-half pounds, the firs boy five and one-half pounds and the second boy six pounds, an up to the present time are alive and doing well.

The parents are both Germans. The father is thirty-fiv years old, medium-sized, dark-complexioned, and was a twin. Th mother is twenty-six years old, over the average height and fai Her first labor, I understand, was difficult, instruments havin to be used. I attended her when she had her second child a girl with talipes equino-varus of both feet. Her third child a boy, lived only two days, although apparently strong whe born.

C. FERDINAND DURAND.

LOCKPORT, N. Y.

FFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITORS:

AS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

communications, whether of a literary or business nature, should be addressed
anaging editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

XXXV. DECEMBER, 1895. No. 5.

THE ECONOMICS OF MUNICIPAL CHARITY.

IE season of the year has again arrived when the question of the care of the poor stands out for consideration with tuated prominence. While a great city like Buffalo always hand a goodly number of individuals whose squalid environ- and helplessness from age and sickness constantly appeals sympathy of a liberal-hearted people, yet it is in the cold er that these and other impoverished and unemployed indi- ls present the greatest claim to public and private charity.

om December to May, in Buffalo, there is less opportunity nployment than at other seasons of the year. The traffic of eat lakes and canals is suspended during this period, and other collateral business interests, as a consequence, come to dstill. So, between the sick and aged poor, whom we always with us, and the influx of laborers suddenly made idle by ose of navigation and a suspension of its attendant industries, is a problem presented for solution which may well attract tention of philanthropists, municipal officers and sanitarians. o deal successfully with this important question in political my there must be a concert of action on the part of these groups. Municipal officers, represented in the mayor and on council and the board of public works, must be in accord the health commissioner and his departmental staff, and these, n, must be aided and supported by philanthropic, charitable arge-hearted citizens. With a unity of action among and en these several elements, the suffering and mortality of this city growing out of its severe winter climate, as directly d to the poor, may be reduced to a minimum.

It is our purpose, at this time, to discuss this question from the standpoint of preventive medicine, which is now and from henceforth will continue to be the great province of physicians. The state has assumed control of medical practice, insisting that physicians must be better educated than formerly and that they shall not be permitted to exercise their functions except under a license which issues after due and adequate examination. By this action the state commissions the doctor as one of its agents to minister unto disease, and it specially charges these, its agents, to go forth into every quarter of the commonwealth and seek to arrest sickness through the application of the most scientific and efficient methods of preventive medicine yet known.

One of the highest functions of prevention may be exercised through channels that relate to the health of the poor. If these unfortunate persons can be kept well they may be made, at least in part, self-supporting. To prevent disease among this class of citizens, nutrition, warmth and cleanliness must receive adequate attention. Starvation, cold and filth are very sure breeders of ill-health. If the poor, through neglect, are allowed to become sick, they cease to be producers and at once become a public charge, and hence a double expense. They then must be cared for either through public or private charity; there is no escape from this mandate. Humanity everywhere has no instinct that does not prompt a tender care of the sick.

The question that we would present for the consideration of the municipality, officially and collectively, is, How can this most important problem be adequately and economically dealt with? Great financial enterprises are absorbing wealthy and public-spirited citizens, and the municipality in its corporate capacity is asked to lend a helping hand, either by direction or indirection, to many of these worthy schemes for the advancement of public and individual interests.

Greater Buffalo is attracting the attention of the business world. Now is a time when Buffalo is on trial before the most critical and astute court in the universe—namely, public opinion. Let it go forth that it has an unassailable system for the proper care of its poor. Let it be understood that we recognise fuel, food, clothing, cleanliness and employment as great sanitary allies and that we deal them out with a liberal hand, yet not recklessly, as preventive measures in the health economics of this great city.

It is economical for the department of public works to employ

liberal hand on our streets during the winter months, to that they may be kept free from snow and ice blockades. ilroads throw the snow up into impassable barriers that be at once carted away from the principal business streets. it especially be remembered that for every shovel employed is giving an object lesson in preventive medicine, which municipal economy.

TOPICS OF THE MONTH.

umored that the water bureau is entertaining a plan to place neters in the houses of water consumers. The object, of is to prevent waste of water or its extravagant use. We derstand the propriety of placing safeguards wherever s undue waste, which is likely to happen in certain factor- very stables and public buildings. But it cannot be ated too strongly that such restriction of the use of water ate families would be a violation of one of the first princi- house sanitation. Theoretically, water should be as free and only such a price fixed on its use as reimburses the city outlay in piping, pumping and carrying on the necessary es of the water department. If the pumping or storage y is inadequate it should be increased.

enjoy the free and unrestricted use of water, after having e nominal fee for its conduct into the premises occupied by holder, becomes a sanitary adjunct of great potentiality. To e it through a meter, thereby limiting its proper use, reduces tary value to a minimum. We hope the health department falo will resist such an innovation, should it be seriously ed, with all the force of influence that it can command.

THER department of this issue is published the plan of ation of the National Confederation of State Medical Exam- and Licensing Boards. Dr. Charles McIntire, of Easton, the chairman of the committee, and he invites any criticism report, with a view to its greater perfection before its final n at the next annual meeting of the confederation, May, We hope every friend of improved methods in medical ion will scrutinise this report with great care and offer to Intire any suggestions that may seem fitting and proper.

FRANCIS SCHLATTER is the latest contribution of the period to the faith cure apostles. To call him a healer is a mistake. This is not a period of miracles nor is it decent for a man to claim Divine power. This is an age of cold, hard facts, and a man can only acquire sufficient knowledge to enable him to begin medical practice through long, weary years spent in study in the laboratory, hospital and medical college. Schlatter is an Alsacean peasant, with some education and intelligence, who settled on Long Island a few years ago as a shoemaker. He was always noted in his home village as a man with queer views and is reported to have had "visions." About a year ago he turned up in New Mexico, claiming to be a New Messiah with extraordinary power of curing diseases. After a reported imprisonment for falsely claiming Divine powers he reappears in Denver, where his "wonderful" cures have lately attracted attention. Threatened with incarceration, he has mysteriously departed from Denver, announcing that he will next set up his Divine cure-shop in Chicago.

It seems to be about time for intelligent people to discountenance the ridiculous performances with which this man Schlatter and all of his kidney, are deceiving people who are ignorant or silly enough to listen to him.

PHYSICIANS in Buffalo are interested in improved street railway service. The Buffalo railway company has long been tried and found wanting. It is not progressive, accommodating or courteous. Its system is wholly inadequate to meet the demands of traffic, its cars are unsanitary and it subjects its motor men to undue exposure in serving cars without vestibuled ends. The Buffalo electric traction company promises something better. Let us try the new company, for nothing could be worse than the present system. Dr. Byron H. Daggett, of Franklin street, in a recent interview (*Buffalo Express*, November 27, 1895,) said some things which deserve to be repeated:

Are you opposed to a new company? he was asked.

I want the arteries of traffic and travel to be multiplied in this city until it has all it needs, which it hasn't now, he said emphatically. I want the street cars to run past my door, one every minute, oftener if it will pay. Why, the arteries carry nourishment to the various parts of the body. Just so with transportation lines in cities.

Property here, in spite of all booms, is not worth a cent more than it was twenty-five years ago. Why? Because it is not sought as a residence street and through lack of street car facilities business hasn

rted this way. The thing to increase the value of property here, ng to make the property useful, is an electric railway line. It to be human nature to kick. People opposed the putting down w pavement here, but they wouldn't like to have the old stone ent substituted for asphalt now. People who object to the con- ion of street car lines here now, would be the first to object to them removed after they had begun operating.

ke any street in any city in the world which has street car service, ally electric railways, and you will be unable to find anywhere ority of its resident and property-owners in favor of removing the to any other street. We need a far more extended and better service s city. We need competition. Now, let 's wake up and have it.

New Haven County Medical Association has passed a set of utions declaring that other states are rejecting by their exam- boards graduates of colleges who in Connecticut are admitted actise without examination; that, in consequence, that state coming a dumping-ground for undesirable practitioners; and the state committee on legislation be instructed to advocate nendment of the law so that all candidates for registration as rs under the medical practice act be required to pass an examina- as is now the case in New York, Pennsylvania and other states.

Obituary.

Basil Norris, Colonel U. S. Army, retired, died at San Fran- Cal., November 11, 1895, aged 67 years. Dr. Norris gradu- t the University of Maryland in 1849 and entered the army istant surgeon in 1852. He served in Texas, Utah and New o until 1862, when he was promoted to surgeon and appointed tor of hospitals in October of the same year. When Burn- rganised the Army of the Potomac into grand divisions, in nber, 1862, Dr. Norris was appointed medical director of the rand division, serving on the staff of General Franklin. the grand divisions were abolished he was assigned to duty ending surgeon at Washington. The writer enjoyed Dr. 's friendship during his service in the field with the Army of tomac, and met him often during his service in Washington. s a most charming man, courteous in his demeanor, consid- of his subordinates, prompt in the discharge of his duty, in his profession, and an ornament to his corps. He died lamented both in military and civil life.

DR. FRANKLIN TOWNSEND, JR., died at his residence, No. 2 Park Place, Albany, October 31, 1895, aged 41 years. He received his early education in Albany, took a full academic course at Williams' College, graduating with the degree of A. B. in 1873, and received his doctorate degree from the College of Physicians and Surgeons in New York in 1876. He spent a year in Europe soon afterward, where he pursued his medical studies and on his return began the practice of his profession in his native city, Albany. In 1880, he was appointed lecturer on physiology in Albany Medical College and the next year was elected to the full professorship in that chair, which he held until compelled to relinquish it through failing health. He was distinguished as a teacher, respected by his pupils and loved by his colleagues. His public and private patients were strongly attached to him, to whose interests he always unselfishly devoted his conspicuously bright and skilful talents.

In 1877, Dr. Townsend married Margaret W. Reynolds, daughter of John H. Reynolds, of Albany, a talented member of the bar and a conspicuous ornament to the bench.

Dr. Townsend possessed a most amiable disposition and his home-life was something delightful to behold. Whoever has partaken of the hospitality that was so lavishly and elegantly dispensed at No. 2 Park Place will not soon forget the beautiful picture that Dr. and Mrs. Townsend presented in the lights and shades of a cultured home-circle.

Dr. Townsend's contributions to the literature of medicine always exhibited a high order of professional knowledge and great research. He wrote easily and well, but never effusively. It was not easy to obtain his consent to write, but when finally he gave it, his pen moved to some purpose. One of his strongest papers is on the pathology of extrauterine pregnancy, published in Volume I., Transactions of American Association of Obstetricians and Gynecologists, 1888. One of his last professional papers was a memorial of Arthur Wellesley Edis, published in the Transactions of the above mentioned association, Volume VII., 1894. It was a touching tribute of love from one friend to the memory of another, couched in simple but elegant English, and some of the sentences might well replace these that are now writing for and of the man who wrote the other.

At the time of his death, Dr. Townsend was emeritus professor of physiology in Albany Medical College; obstetrician to the

Franklin Townsend Jr.

Albany City hospital; visiting obstetrician and gynecologist to St. Peter's hospital and visiting physician to the Albany Protestant orphan asylum. He was a member of the local city and county medical societies, of the Medical Society of the State of New York, Fellow of the British Gynecological Society and a Fellow of the American Association of Obstetricians and Gynecologists. His wife and two sons, aged 16 and 11 years respectively, survive him.

Dr. Robert Battey, of Rome, Ga., died at his residence, November 8, 1895, aged 67 years. He received his preliminary education at Augusta, Ga., and Phillips's academy, Andover, Mass., and took his doctorate degree at Jefferson Medical College, March 7, 1857. From November, 1872, to October, 1875, he was professor of obstetrics at the Atlanta Medical College and was editor of the *Atlanta Medical and Surgical Journal.* He was gifted as a physician and an ingenious surgeon, having devised many original methods for the treatment of disease. His greatest claim to renown, however, consists in an operation that he devised to effect the change of life in women by removal of the ovaries, its object being to modify or cure certain diseases otherwise beyond remedy. Besides membership in his local societies, city, county and state, he was a Fellow of the American Gynecological Society and a member of the American Medical Association. He served in the medical department of the Confederate army from the beginning to the end of the war. Dr. Battey was a courteous gentleman, an able physician and died respected by his fellow-citizens and his professional colleagues.

Dr. Thomas Kieth, of London, died at his home, October 9, 1895, aged 68 years. He received his early education at Aberdeen, but his medical education was entirely conducted at Edinburgh, where he lived during the greater part of his professional life. He served as an apprentice to Sir James Y. Simpson and married a first cousin of Simpson's wife. In his first professional years he practised obstetrics with conspicuous success, yet at an early period he devoted himself to general surgery, but later limited his practice entirely to gynecological surgery. In 1862, Kieth performed his first ovariotomy, at which time Sir Spencer Wells had done but eight such operations.

Believing the general hospitals were not sufficiently aseptic he reconstructed a house in Edinburgh at a cost of $15,000,

erved as a private hospital where many of his early ons were undertaken. In 1878, he published statistics stonished the world on account of the low rate of ity that they exhibited. In 1888, he moved to London, he has since resided, and in association with his son, ene Kieth, continued the practice of abdominal surgery. Of ars he turned his attention to the electrical treatment of s, in which he was somewhat enthusiastic, but it is doubtful r his hopes and expectations have been fully realised. For three years Dr. Kieth's infirmities prevented him from doing tive work. During the past summer he visited his home ontrose, in Scotland, where he somewhat improved, but on ng to London the heat proved debilitating and his disease ated fatally Wednesday morning, October 9th. He was on Friday in Kensal Green Cemetery. Dr. Kieth was an ry fellow of a large number of British and foreign societies the United States, where he was deeply respected, his y will long remain green.

Personal.

AMES O. PUTNAM, of Buffalo, who has been a member of the of the University of Buffalo since its foundation, fifty go, has been elected chancellor, to fill the vacancy caused death of the Hon. E. Carlton Sprague. This is a deserved tardy recognition of the talent and services of Mr. Putnam no doubt, a greater gratification to his friends than to him- Hon. Wilson S. Bissell was chosen vice-chancellor upon the ion of Mr. Putnam.

O. WERDER, of Pittsburg, (*Pittsburg Medical Review*,) one original members of the editorial staff of the *Review*, has y been elected to fill the chair of professor of diseases of in the Western Pennsylvania Medical College. Dr. Werder he place of Professor W. J. Asdale, who recently resigned ition as a member of the faculty. Dr. Werder's clear judg- uperior abilities of diagnosis and operative skill make him edingly valuable addition to the teaching staff of the col- nd we predict for him a measure of success second to none.

DR. J. HENRY DOWD, of Buffalo, has gone to New York and Philadelphia, where he will spend a few weeks in post-graduate medical schools in preparation for the practice of a specialty.

DR. ELI H. LONG, of Buffalo, has been appointed a member of the governing council of the Dental Department of Buffalo University.

DR. LILLIAN C. RANDALL, of Buffalo, who established the Riverside hospital in 1892, has removed it to 327 Breckenridge street.

DR. JOHN H. DANIELS, of Buffalo, has been appointed lecturer on anatomy in the Medical Department of Niagara University.

Society Meetings.

BUFFALO ACADEMY OF MEDICINE.—The section on gynecology and obstetrics holds its meetings the fourth Tuesday of every month. The remainder of the program until the vacation season is as follows:

December 24, 1895, discussion: (*a*) Surgical treatment of puerperal sepsis, Dr. C. C. Frederick; (*b*) What are the contra-indications to operation? Dr. P. W. Van Peyma; (*c*) What are the results thus far of operative treatment, and what are the causes of failure in fatal cases? Dr. H. E. Hayd.

January 28, 1896: Points of interest culled from my gynecological practice, Dr. Marcel Hartwig. Paper: subject to be announced, Dr. S. Y. Howell.

February 25th: A few points of interest in gynecology in relation to insanity, Dr. Helene Kuhlman. Paper: subject to be announced, Dr. H. E. Hayd.

March 24th: How classify retroflexion with a view to treatment? Dr. Edmund Luke. Placenta previa, Dr. T. G. Allen. Paper: subject to be announced, Dr. C. C. Frederick.

April 28th: Paper: subject to be announced, Dr. M. D. Mann Septicemia in the new-born, Dr. Irving M. Snow.

May 26th: Digestive disturbances in gynecological and obstetrical cases, Dr. A. L. Benedict. Some cases in practice, Dr. John J. Walsh.

June 23d: Phlegmasia Alba Dolens, Dr. Ludwig Schroetter. Paper: subject to be announced, Dr. M. A. Crockett.

tings are called to order at 8.30 P. M. Fellows of the
ıy are requested to present specimens and report cases.
to occupy thirty minutes and the general discussions ten
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DR. CARLTON C. FREDERICK, *Pres.*
DR. LILLIAN C. RANDALL, *Sec'y.*

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uthern Surgical and Gynecological Association held a most
ing meeting at Washington, November 12, 13 and 14, 1895.
sident, Dr. Lewis McLane Tiffany, of Baltimore, adminis-
ıe affairs of the association with dignity and discretion.
S. C. Busey, of Washington, in delivering an address of
e, said :

licit your aid and coöperation in our effort to secure the protec-
our people from the horde of imposters and charlatans, which
e driven from your borders by the enactment and enforcement
cal practice laws, and which has made the District of Columbia
on rendezvous where the most atrocious methods of the charla-
mercenary impositions are openly and flagrantly committed to
ng, injury and robbery of its citizens. You represent the most
ial and intelligent class of suffragists for whose aid on the hustings
the polls we plead. To state the deplorable condition of this
fully and broadly, there are five medical schools and several
societies chartered by acts of Congress, or under the general
ration law authorised and empowered to license persons to prac-
art and science of medicine, without any uniform, and by some,
any standard of qualification, beyond the ability and willing-
the applicant to pay the required fees or give promissory notes
payment; and under the provisions of the general incorpora-
, any dozen of persons can obtain a charter upon payment of
for recording the same, authorising them as a body corporate to
the degree of M. D. at their pleasure and will. Such is the
f this Federal territory, which is under the exclusive jurisdic-
the highest tribunal of legislation in the land, made up of the
ntatives and senators from forty-nine states and territories,
ave enacted medical practice laws for the protection and welfare
citizens. Take these facts home with you and re-echo them
out the length and breadth of the land, that such criminal neg-
t less disgraceful and scandalous than the slums of vice, may
tinue to afflict the citizens of the Federal territory.

eception was held by the medical profession of Washington
association at the Arlington on Tuesday evening, and Dr.
Taber Johnson entertained the association at his residence

on Wednesday evening. The next meeting was appointed to b held at Nashville the second Tuesday in November, 1896, an Dr. Ernest S. Lewis, of New Orleans, was elected president.

THE Tri-State Medical Society, (Iowa, Illinois and Missouri,) at it last meeting elected the following officers: president, Dr. Robe H. Babcock, Chicago; first vice-president, Dr. A. H. Cordie Kansas City; second vice-president, Dr. W. A. Todd, Chariton, Ia treasurer, Dr. C. S. Chase, Waterloo, Ia.; secretary, Dr. G. W Cale, St. Louis. The next meeting will be held in Chicago th first Tuesday, Wednesday and Thursday in April, 1896.

What Our Contemporaries Think of Us

(Continued from the JOURNAL *for September.)*

[Journal of the Medical Sciences, Fort Wayne, Ind.]

We are pleased to announce that the BUFFALO MEDICAL JOURNA will in a few weeks have reached fifty years, the *golden age*. We co gratulate the editor and publishers on the success of this journal. Fe very few, indeed, of the medical journals of this country have reache the age of fifty years and it gives us great pleasure in calling the atte tion of the profession to the fact that the BUFFALO MEDICAL JOURNA has attained the *golden age*. We extend to the editor our hearty co gratulations and trust the JOURNAL may prosper in the future as it has the past. It is one among our most valued exchanges and we alwa welcome it to our table.

[Atlanta Medical and Surgical Journal.]

The August issue of the BUFFALO MEDICAL JOURNAL is the jubil number, beginning the second half-century of its existence. Besid some excellent medical and surgical articles, it contains a full history the MEDICAL JOURNAL, from its organisation in 1845 by the eld Austin Flint through all its administrations down to the present tim The same article, which is by the present able editor, Dr. Willia Warren Potter, deals with other medical matters in the City of Buffa for the same period. We congratulate our esteemed exchange upon i past history and wish it a long and prosperous future.

[St. Louis Medical and Surgical Journal.]

The BUFFALO MEDICAL JOURNAL celebrated its golden jubilee b issuing a large and handsome number for its August issue. Establishe

in 1845, by Austin Flint, it has continued to prosper, and bids fair to excel its previous record under the fostering care of its present editors. Our younger cotemporary, for it is two years our junior, shows no sign of decrepitude, despite the fifty years which have accumulated on its shoulders, but it is rather a bright example of youth renewed and vigor undiminished.

[Memphis Medical Monthly]

The BUFFALO MEDICAL JOURNAL, in celebrating by gala number its fiftieth birthday, has proven, by its survival and constant growth during this period, that it is one of the fittest. May it continue, as now, in the front rank of medical journalism and live to celebrate many more anniversaries.

[Richmond Journal of Practice.]

The BUFFALO MEDICAL JOURNAL for August, 1895, comes to us in a handsome new dress and greatly enlarged. In addition to more than its usual amount of scientific original papers, medical items and editorials, there is a special article of forty-eight pages from the pen of one of its present talented editors, Dr. William Warren Potter, giving in his own peculiar, graphic style a historical reminiscence of medical journalism in Buffalo during the last fifty years, together with its medical colleges, hospitals and medical societies. A view of Buffalo in 1845, with its then 30,000 population, contrasted with the present beautiful composite picture in 1895 and with its 360,000 inhabitants, gives some idea of the material advances of this lovely city. Dr. Potter claims to give only a résumé of the salient events of the past fifty years of its medical history. In doing this he gives the names of those physicians connected with the formation and progress of its colleges, hospitals and local societies down to the present time Many finely executed engravings of hospitals and other medical buildings serve to connect the past with the present as well as to forecast the future of this progressive medical center.

The founder, editor and owner of this sterling medical journal was the great medical teacher and author, Dr. Austin Flint. The present editors are Drs. Thomas Lothrop and William Warren Potter, who are ably assisted by an associate staff, consisting of Drs. William C. Krauss, John A. Miller, Ernest Wende, James W. Putnam, John Parmenter and Alvin A. Hubbell. The JOURNAL has witnessed nearly all the improvements in medicine and surgery that are valuable today, and it has reason to triumph over its long life, so full of progress and scientific research. With the August number the present able management have signalled its appreciation of the support from all who have had a share in its life by "donning new garments, manifesting new energy, increasing the number of its pages," and in a number of other ways adding new features which cannot fail to continue it in the foremost ranks of

the medical periodicals of this or any other country. May the BUFFALO MEDICAL JOURNAL live to celebrate its centennial and share the honors of medical progress in the fifty years to come. To its present corps, the *Richmond Journal of Practice* extends its heartiest congratulations.

[Columbus Medical Journal.]

The jubilee number of the BUFFALO MEDICAL JOURNAL is a sock-dolager. Our friend, Dr. Potter, spread himself and astonished his most sanguine friends, and came down the home stretch flying, distancing many of his competitors in the first heat. The JOURNAL, as usual, was especially good, in addition to the interesting history embracing a period of fifty years, between the inception of the JOURNAL by the distinguished Austin Flint and the present. We wish the JOURNAL and its enterprising editors another half century's success that will not only equal, but excel the one just past.

[Occidental Medical Times.]

The August issue of the BUFFALO MEDICAL JOURNAL completes the fiftieth year of its publication, and the JOURNAL'S semi-centennial has been celebrated by the issue of a jubilee number, and the permanent increase of its reading-matter from sixty-four to eighty pages. The special issue is handsomely printed and profusely illustrated. Naturally, the most interesting feature of it is the retrospect of Buffalo's medical history during the past fifty years. Herein is graphically detailed the progress of the city and its medical institutions during the years in which Buffalo, from a city of 30,000 inhabitants has steadily increased to one of 300,000. The JOURNAL was founded in 1845 by Austin Flint, and has since numbered amongst its editors many who have made their mark in the medical history of the great State of New York.

[Canada Medical Record, Montreal.]

We cannot lay down the August number of the BUFFALO MEDICAL JOURNAL, which is its jubilee number, and which we have just perused without expressing our admiration for the enterprise of its editors, Drs Thomas Lothrop and William Warren Potter. It was founded in 184 by Dr. Austin Flint, and has consequently completed its fiftieth year The jubilee number, besides containing many very able scientific articles is profusely illustrated with engravings of the Buffalo hospitals. We wish our bright and newsy contemporary as much success in the future as it has attained in the past. It has always been among the most welcome of our exchanges.

[Medical Review, St. Louis.]

jubilee number of the BUFFALO MEDICAL JOURNAL is before it this journal enters upon its fifty-first year of existence. lity of the JOURNAL is too well known to need pointing out. several valuable articles the jubilee number contains the history OURNAL, which is, at the same time, the history of the medical n of Buffalo. Some of the most eminent and best known men nerican medical profession have been the editors of the JOURNAL, we may mention Dr. Austin Flint, Dr. Sanford B. Hunt, Dr. lint, Jr., Dr. Julius F. Miner, etc. The BUFFALO MEDICAL may be proud of its history and the men that have been and ected with its management. We hope that it will continue to for the benefit of the medical profession and to the honor and the City of Buffalo.

[Journal of Practical Medicine, New York.]

semi-centennial number of the BUFFALO MEDICAL JOURNAL, is at hand. It is a handsome number of 130 pages, and is made y interesting by a large number of illustrations. The most ing article in the number is contributed by the present editor, am Warren Potter, and occupies nearly fifty pages. Dr. Potter tofore received our congratulations, and we extend them again, an honor, which will come to but few of us, to celebrate the nniversary of the journal we edit.

[Dental Practitioner and Advertiser, Buffalo, N. Y.]

excellent and sterling monthly, the BUFFALO MEDICAL JOUR- ently celebrated its semi-centennial. It was established by Dr. lint in 1845, and it has occupied a front rank in professional e from that day to this, but never was it more truly repre- of the profession, or more prosperous than today, under the p of Dr. Thomas Lothrop and Dr. William Warren Potter. Its tennial number was worthy its reputation, and whether in the its contents or the beauty of its typography and illustrations, it emorable issue. May it continue to flourish until it shall reach nnial, and then but enter upon a new era of prosperity.

[Quarterly Medical Journal, Sheffield, Eng.]

BUFFALO MEDICAL JOURNAL has completed its jubilee. It was n 1845, when Buffalo contained only 45,000 inhabitants; now numbers a population of upwards of 360,000. Austin Flint or, founder and also proprietor of this sturdy representative of y be called provincial medical journalism in the United States. ditorial roll is found also the name of Austin Flint, Jr. In the

early days of the JOURNAL Dr. Frank Hastings Hamilton recorded in its pages his surgical clinics and fracture tables, from which sprang the material upon which he founded his authoritative and classical work on fractures and dislocations. The jubilee number (August, 1895,) is before us, and besides many very excellent articles on a variety of subjects, it contains much readable and interesting information as to the men who made the journal what it is.

Book Reviews.

A TEXT-BOOK ON NERVOUS DISEASES. By American authors. Edited by F. X. DERCUM, M. D., Clinical Professor of Diseases of the Nervous System in the Jefferson Medical College, Philadelphia. In one handsome octavo volume of 1052 pages, with 341 engravings and seven colored plates. Cloth, $6.00; leather, $7.00. Philadelphia: Lea Brothers & Co., Publishers. 1895.

This work has for contributors some of the most prominent men in New York, Philadelphia and other centers. The arrangement of the subjects is good and somewhat different from that usually followed in similar works.

The opening chapter, by Weir Mitchell and the editor, on general considerations, contains some new diagrams and observations. Among the illustrations of newer instruments of precision in diagnosis we notice with pleasure Krauss's foot and leg dynamometer.

The examination of the eye from a neurological standpoint is by Charles A. Oliver. The general morbid states of the nervous system are taken up by the editor, J. H. Lloyd and P. C. Knapp, in three chapters.

The chapter on traumatic neurosis is particularly full and complete. Under this heading we are interested in the prognosis given by the author—namely, "It is probable that a large proportion of the cases, taking all cases as they come, if they could be placed under proper conditions immediately after the injury, would do well." E. D. Fisher discusses the diathetic and toxic affections of the nervous system, in a series of short, pithy articles. Chapter VI. deals with diseases the direct or indirect result of infection, by Osler. Wharton Sinkler treats of choreiform affections, in a chapter in which more than the usual space is allotted to this subject. It is rendered very plain by the numerous illustrations, mostly photographic, with which it is embellished. Local and occupation spasms is by C. W. Burr, in which we notice some varieties which have not previously received much attention in neurological works. Functional tremors, paralysis agitans and epilepsy are by Gray. In connection with epilepsy he gives a very complete table of the results, immediate and permanent, of cranial operation cases. W

t out of forty-four cases operated upon only two are given
. General diseases of the brain are written about by N.
and the editor.

anatomy of the cerebral cortex and the localisation of its
s, by Charles K. Mills, is one of the most interesting chap-
largely illustrated. We notice that Mills, in his article
ry localisation, still maintains, as in 1888, that "There is
erebrum a region for general sensation, including touch,
mperature and, possibly, the senses of pressure and the loca-
limb, which could be divided into special sub-areas for the
distinct portions of the body, and that these regions lay
e of and in close relation with corresponding motor areas,
they were not identical with them," also that no part of
n was more likely to contain these differentiated areas for
n than the gyrus fornicatus, the hippocampal gyre, the
us and the post parietal convolutions. In reference to
calisation there is not yet harmony in the entire cerebral
tation of the retina. Of auditory localisation he says:
calisation of the auditory sphere can be regarded as settled
in the superior temporal gyres." The olfactory center
be located in the uncirate gyres. Gustatory localisation
or locates in the fourth temporal convolution. Of diseases
refrontal region he says:

al disturbances of a peculiar character occur, such as mental
and uncertainty, want of attention and control, and impair-
judgment and reason; closely studied the inhibitory influence
ain both upon the psychical and physical action, appears to be
ed. Memory is not seriously affected, although a continuous
thought cannot well be followed and complex intellectual pro-
nnot be thoroughly performed.

l diseases of the brain, by Charles L. Dana, Allen Starr
editor, occupy three chapters that are profusely illus-
The diseases of the spinal cord are completely and clearly
ed by Lloyd, Prince and Peterson. Paretic dementia is by
or, also syphilis of the nervous system, the latter being a
addition to that branch of medical literature; the dis-
nerves in general, by Wharton Senkler; diseases of the
erves, by George E. de Schweinitz and Herter; diseases of
cles, by Jacobi; tropho-neuroses, by Collins, are all com-
d profusely illustrated. We would especially call atten-
he collection of photographs of cretins shown.

notice with interest the positive statement in treatment of
almic goitre, "The sheep's thyroid gland and its extract are
" The article on headache is scanty and incomplete. We
a person unacquainted with the subject would find very
lp here.

surgery of the brain, spinal cord and nerves is a complete
of this subject up to date. We could only wish it had
ittle more extended. The book closes with a few general

considerations on neuro-electro therapeutics, by George W. Jacob
The volume will certainly meet the demand for a treatise
nervous diseases up to date, but we express the hope that for so
time to come books on this subject will partake more of the mon
graphic type. J. W. P.

I. THE PHYSICIANS' VISITING LIST (Lindsay & Blakiston) FOR 189
Forty-fifth year of its publication. Sold by all booksellers and dru
gists. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut stree

II. THE MEDICAL RECORD VISITING LIST AND PHYSICIANS' DIARY F
1896. New Revised Edition. With Calendar, Tables of Dose
Tables of Equivalents, Directions for Emergencies, Antisepsis, D
infection, Special Memoranda, Cash Account, etc., etc., thirty a
sixty patients per week, bound in black or red morocco leather wi
flap, $1.25 and $1.50. Circular on application. New York: W
liam Wood & Company, Publishers.

III. THE MEDICAL NEWS VISITING LIST FOR 1896. Weekly (dated, f
thirty patients); Monthly (undated, for 120 patients per month); Pe
petual (undated, for thirty patients weekly per year); and Perpetu
(undated, for sixty patients weekly per year). The first three styl
contain thirty-two pages of data and 160 pages of blanks. T
sixty-page Perpetual consists of 256 pages of blanks. Each style
one wallet-shaped book, with pocket, pencil and rubber. Seal gra
leather, $1.25. Philadelphia; Lea Brothers & Co. 1895.

I. The Lindsay & Blakiston visiting list, so well known
every practising physician, appears with its usual promptness a
presents several improvements in the edition for 1896. Mo
space has been allowed for writing the names and to the mem
randa page; a column has been added for the amount of t
weekly visits and a column for the leger page. To do this wit
out increasing the bulk or price, the reading matter and memoran
pages have been rearranged and simplified. The lists for sevent
five patients and 100 patients will also have special memoran
page as above, and hereafter will come in two volumes only, dat
January to June and July to December. While this makes a boo
better suited to the pocket, the chief advantage is that
does away with the risk of losing the accounts of a whole ye
should the book be mislaid. The publishers announce that befo
making these changes they have personally consulted a number
physicians who have used the book for many years, and have tak
into consideration many suggestions made in letters from all pa
of the country.

This visiting list is the oldest in the market, but it keeps itse
abreast of professional progress. The prices range from $1.00
$2.25, according to size.

II. The Medical Record Visiting List for 1896 is fully up
its old standard of excellence. There are thirty closely print
pages, preceding the visiting list proper, that contain the tabl
and other items noted in the title above. The paper is fine, t

ment for recording visits and other memoranda is excel- the binding, which is the best morocco, soft and flexible, l to none. It is published in two sizes, for thirty and tients a week, and either dated for 1896 or without dates, he requirements of the physician. It is difficult to see how ting list could be improved upon.

The Medical News Visiting List for 1896 still maintains to popular favor as one of the best in the field. This has been thoroughly revised and brought forward to the period in all of its appointments. The thirty-two pages preceding the daily record contains the usual tables of e that are so valuable to busy physicians. The visiting er and other memoranda pages are classified in most manner. The mechanical execution of the book is unsur- n paper, binding and cover. A ready reference thumb- dex is a time-saving device that repays for its small addi- st, 25 cents. Taken altogether, it is one of the most sat- visiting lists extant.

LECTURES ON DISEASES OF THE NERVOUS SYSTEM. Delivered e National Hospital for the Paralysed and Epileptic, London. R. GOWERS, M. D., F. R. S., Physician to the Hospital; Con- g Physician to University College Hospital, etc. Octavo, pp. Price, $2.00. Philadelphia: P. Blakiston, Son & Co., 1012 ut street. 1895.

publication of clinical lectures in book form must always ification either from the rarity of the case, or else from the method of presenting old and familiar subjects.

the latter which makes this book delightful reading in moments. One does not read it to learn new facts, but to e method of presenting difficult subjects in what seems to ost effective way. In every lecture may be found, scat- re and there, broad principles applicable to every physi- ork, and useful in any lecture on any subject. As these nuch to the value of the book we are constrained to make lated extracts:

vell for a teacher, if he can, to resist the attraction of the t is always unwise for him to hesitate to inculcate that which is y because it is old. Truth and novelty are by no means neces- ociated.

eacher should remember that to neglect to repeat is an unpar- in. The unpardonable sin of the student is to say yes when to say no, to say that he saw a thing, that he heard a thing, lt a thing, that he understood a thing when he did not.

learn a diagnostic rule, indeed, never accept any general without also endeavoring to ascertain on what the rule or the assertion rests. Unreasoned conclusions are the bane ts. Fix the assertions by their evidence, the rules by their and not only do they remain, but they take root and they art of your real knowledge and a source of increasing power.

It is true of ourselves and it is true of our patients, that next knowing what can be done and how to do it, the most important th is to know what cannot be done. Sad is the waste of time and mo caused by efforts to attain that which cannot be. Sadder still is waste of hope—hope created by baseless expectation—and the destr tion of it that we call disappointment; disappointment that would be were it not for the anticipations that have no justification.

Let me at the outset warn you against the frequent error of thi ing that a rare disease will only yield you knowledge which will rarely needed. It is not so. Diseases which are uncommon cannot studied without considering common facts and without giving increa ability to recognise diseases which are often met with.

In the postscript to the last lecture, the honesty of purpose Professor Gowers is thus clearly shown:

The lecture is left as it was delivered. Although many stateme have been contradicted by the later facts of the case, it is often use thus to perceive such traversing of inference and fact, because it c closes the limits of our power of discerning that which is and of fo casting that which is to be.

The publishers are to be congratulated on their part of work, for they have presented to the profession a library book its truest sense. J. W. P

TWENTIETH CENTURY PRACTICE. An International Encyclopedia Modern Medical Science. By leading authorities of Europe a America. Edited by THOMAS L. STEDMAN, M. D., New York C In twenty volumes. Volume IV. Diseases of the Vascular Syst and Thyroid Gland. New York: William Wood & Compa 1895.

The first section of this volume, consisting of 454 pages, devoted to the consideration of diseases of the heart and peric dium, and is written by James T. Whittaker, of Cincinnati. T first sixty pages of this monograph are taken up by diseases of pericardium, while the remainder, nearly 400 pages, treat of d eases of the heart itself and the endocardium.

This is by far the most exhaustive treatment that the heart l ever received in literature, and reflects an everlasting credit up the distinguished author. Whittaker is as interesting in pathology as he is in therapeutics, which is alike a compliment his rhetoric and to his knowledge of the subject. It is as pleas to read his description of aortic insufficiency as it is to trace Sh lock Holmes through the mazes of an intricate criminal investi tion. Whoever should follow these lines closely and study th carefully will learn something about the heart that he never kn before.

In the next section, comprising about 100 pages, we find d eases of the blood-vessels considered at the hands of Arthur Ern Sansom, of London, whose reputation is fast growing into c spicuous eminence. This is a subject that has received less att

retofore than its importance would seem to merit. A con-
le portion of this section is devoted to the study of chronic
—atheroma—which is for the first time treated in literature
ything like exhaustive precision. Aortic aneurism and arte-
rosis are admirably set forth by this accomplished author.
ird section, consisting of about forty-five pages, discourses
iseases of the lymphatic vessels, and is from the pen of Ber-
Dawson, of London. Here again may be found much of
t not elsewhere available.
final section, on diseases of the thyroid gland, including
ema, cretinism, exophthalmic goiter, goiter and inflamma-
d neoplasms, is prepared by George R. Murray, of Newcastle-
e. This author introduced the thyroid gland treatment for
ema and cretinism, which has made him so famous. In this
raph he enters very fully into the history and application of
roid treatment and presents the subject in systematic form.
fore the searcher could only find scattering journal articles
originator of the method, but now he will be able to exam-
exhaustive commentary written by Dr. Murray himself and
within the covers of this volume, which, in respect to the
ance of the subjects treated or the justly celebrated reputa-
the authors, is not second to any that have preceded it in
eries.

OF THE UNIVERSAL MEDICAL SCIENCES. A Yearly Report of Progress of the General Sanitary Sciences throughout the rld. Edited by CHARLES E. SAJOUS, M. D., and seventy associ- editors, assisted by over 200 corresponding editors, collabora- and correspondents. Illustrated with chromo-lithographs, ravings and maps. Five volumes. The F. A. Davis Company, lishers, Philadelphia, New York, Chicago. London: F. J. man. Australian Agency: Melbourne, Victoria, 1895.

eighth edition of this important work has been delayed at in presenting itself, but it is none the less welcome for . It still maintains its reputation as one of the best con- ons of the medical literature of the year that has yet been ed for the favor of the medical profession. The slight delay ppearance, due to causes entirely beyond the control of the does not detract from its value as a work of reference. ct is, year by year, its worth increases with reference to its sues, because it keeps the literature of bygone years, always fficult to reach than that of the present, within easy com-

re have been some changes in the editorial staff, but in the stands as heretofore and the general plan of the work has n changed. The editor, in his preface, pays a just tribute nemory of Dujardin-Beaumetz, which is eloquent in diction shed in rhetoric.

We here and now affirm an opinion heretofore expressed tha it would be difficult for the teacher, editor, writer or progressiv physician to dispense with this comprehensive and most usefu work. It would be missed more than any other of its kind shoul it discontinue its annual visits.

COD-LIVER OIL AND CHEMISTRY. By F. PECKEL MÖLLER, Ph. D. Lon don: Peter Möller, 43 Snow Hill, E. C. New York: Wm. H Schieffelin & Co. 1895. Printed for private distribution.

The first part of this work gives a brief account of Norway, it people and its industrial conditions. It then treats of cod-live oil, the methods of catching the fish, the preparation of the oil an an account of its constituents. In the old days the oil was pre pared by the putrefaction of the livers of the cod. Peter Möller in 1853, was the first to render the oil from the fresh livers b means of steam. Even this product was not entirely satisfactory as it produced disagreeable after-effects. In consequence of thi P. M. Hyerdahl began an investigation for the purpose of remedy ing this defect. Mr. Hyerdahl finds that the disagreeable afte effects are caused by the presence of hydroxy acids in the oil, an that these may be excluded by rendering the livers in an atmos phere of carbon dioxide, which process is being used by Pete Möller. The book gives a very readable and interesting accoun of cod-liver oil and its preparation.

The second part of the book is a veritable pictorial organi chemistry. It is not a work which can be used by beginners, bu chemists may read it with interest and profit. J. A. M.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NEW YOR FOR THE YEAR 1895. Edited by FREDERIC C. CURTIS, M. D., secretary Published by the Society. William J. Dornan, Printer. 1895.

The annual volume showing the work of this society present itself in excellent form. The financial status of the society wa never better than at present, nor were its transactions ever pub lished in a more attractive or substantial manner. The presiden Dr. George Henry Fox, departed from the usual custom and rea his address on the afternoon session of the second day, instead o in the evening at the capitol. The subject of his address, Credu ity and scepticism in modern medicine, proved interesting as we as instructive. The usual number of papers and discussions follo and then the obituaries. One of the most useful features of thes volumes is the publication of the lists of members, honorary permanent, delegate and those of county societies.

This society would do itself injustice if it changed the for and method of the publication of its transactions. A standar octavo is the proper size for a library book, and in its present for this volume is neither too cheap nor too expensive. There shoul be no further attempt to cheapen the publication in price at th expense of quality.

AL OF CHEMISTRY. A Guide to Lectures and Laboratory Work Beginners in Chemistry. A Text-book specially adapted for idents of Pharmacy and Medicine. By W. W. Simon, Ph. D., D., Professor of Chemistry and Toxicology, College of Physi- ns and Surgeons, Baltimore; Professor of Chemistry in the Mary- d College of Pharmacy. New (fifth) edition. In one octavo ume of 502 pages, with forty-four engravings and eight colored tes, illustrating sixty-four of the most important chemical tests. oth, $3.25. Philadelphia: Lea Brothers & Co. 1895.

is manual, which is especially intended for the use of medical ts, shows evidence of its popularity in the production of litions in a comparatively short space of time.

e first fifty pages of the work go over the theory of chemis- m the elementary definitions to a discussion of the periodic While the space devoted to these things is small, still they ry well given. The work, furthermore, treats of descriptive stry, qualitative and quantitative analysis, physiological stry and the chemicals mentioned in the U. S. Pharmacopeia. ubject matter, though briefly considered in some cases, is ell given indeed.

e book is very well bound and printed and the colored plates cellent. J. A. M.

T-BOOK ON PRACTICAL THERAPEUTICS, with Especial Reference the Application of Remedial Measures to Disease and Their ploymont upon a Rational Basis. By HOBART AMORY HARE, D., Professor of Therapeutics and Materia Medica in the Jeffer- Medical College of Philadelphia. With special chapters by . G. E. de Schweinitz, Edward Martin and Barton C. Hirst. w (fifth) edition, thoroughly revised. In one octavo volume of pages. Cloth, $3.75; leather, $4.75. Philadelphia: Lea others & Co., Publishers. 1895.

t before in our experience have we been called upon to a fifth edition of a book within five years of its first appear- This fact not only bespeaks the popularity of this work, is a strong testimonial to its value as a text-book; for no n this subject without special merit could present such a . In the present edition some changes have been made in y of revision, suggestions, additions and, in some instances, s have been rewritten. The antitoxin treatment of diph- is briefly discussed and the author gives a résumé of our t knowledge on the subject.

e of the particular reasons for the popularity of this work s of the close relationship between the two departments, eutics and materia medica. Hare has closely interwoven nd yet treated them in separate and distinctive sections. prehend the demand for this useful treatise will continue at the present edition will become speedily exhausted. In er-changing nature of many portions of the subject it is, s, fortunate that it should be so.

EYESIGHT AND SCHOOL LIFE. By SIMEON SNELL, F. R. C. S., Ed., Ophthalmic Surgeon to the Sheffield General Infirmary and to the School for the Blind; Lecturer on Diseases of the Eye at the Sheffield Medical School; Consulting Ophthalmic Surgeon to the Rotherham Hospital; Author of The Electro-magnet in Ophthalmic Surgery, Miner's Nystagmus, etc. With illustrations. Duodecimo, pp. xii—70. Price, 63 cents. Bristol: John Wright & Co. 1895.

Mr. Snell has somewhat extended a popular lecture which he originally delivered before an association of teachers, and has placed it before a larger audience in the form of this little book. The subject matter embraces the consideration, in nontechnical language, of the accommodation and refraction of the eye; refractive errors, their causes and effects; and the hygiene of the school room, so far as it appertains to lighting, desks and seating of pupils and the proper positions for reading and writing. The author then adds some useful suggestions regarding hours of study, physical exercise, duties of parents and duties of teachers, and concludes with remarks on the results of proper correction of errors of refraction.

This little work is very practical and is to be commended to teachers, parents and others who are concerned with school life.

A. A. H.

SOME PHYSIOLOGICAL FACTORS OF THE NEUROSES OF CHILDHOOD. By B. K. ROCHFORD, M. D., Professor of Physiology and Clinician to Children's Clinic, Medical College of Ohio; Member of Association of American Physicians and American Pediatric Society, etc. Duodecimo, pp. viii.—122. Price, $1.00. Cincinnati: The Robert Clarke Company. 1895.

This work appeared first as a series of papers in *Archives of Pediatrics*. Dr. Rochford speaks with authority, experiments in the physiologic laboratory being, so far as possible, the basis for his statements. He justly considers the chapter on auto-intoxication the most important in the book. Next in importance should be placed the chapter on reflex irritation. The concluding chapter on excessive nerve activity might profitably be read by all parents and educators. The perusal of the volume will well repay not alone the pediatrist, but the general practitioner as well.

M. J. F.

A MANUAL OF OBSTETRICS. By A. F. A. KING, M. D., Professor of Obstetrics and Diseases of Women in the Medical Department of the Columbian University, Washington, D. C., and in the University of Vermont, etc. New (sixth) edition. In one 12mo volume of 532 pages, with 221 illustrations, Cloth, $2.50. Philadelphia: Lea Brothers & Co. 1895.

This book is well and favorably known to the medical profession. That it has progressed to a sixth edition since it first appeared, in 1882, is manifest evidence of its value and ought to

d gratification to its author, which no doubt it does. In the ent edition some previous errors have been corrected, and a ber of additions and modifications made. Seventy-one new trations have been added, borrowed, for the most part, from reatises of Parvin, Hirst, Leishman, Playfair and Galabin. The ishers have made a handsome volume.

URES ON APPENDICITIS AND NOTES ON OTHER SUBJECTS. By OBERT T. MORRIS, A. M., M. D., Fellow of the New York Academy f Medicine, American Association of Obstetricians and Gynecolo-ists, etc., etc. Octavo, pp. xviii.—163. With illustrations by ENRY MACDONALD, M. D. New York: G. P. Putnam's Sons, 27 Vest Twenty-third street. 1895.

'his author has a special knowledge of the subject treated of is book. He has a peculiar aptitude for imparting a clear rstanding of his subject to his audience—listeners or readers. as something to say, says it and stops. When a man writes tence like the following we naturally nestle close to him dur-is discourse, written or oral. Dr. Morris says in his preface: the matter of operative procedures I have due respect for ods which are different from my own, believing that in the f surgery every surgeon is a law unto himself and that he s the factors of his own success."

'he first chapter of the book is devoted to the consideration of cal cleanliness under the title, preparation of surgeon and nt. It is the clearest and most concise statement of the case ave ever seen, and the wayfaring man, though a fool, could ail to understand it. To make the field of operation and the eon's hands surgically clean is not a difficult procedure in fact; s only been made so by the unnecessarily complicated rules of cal diletanti and devotees of everything that is novel.

'he author's anatomical description is brief and clear, and when proaches the subject proper he rises to the occasion with a mity that is striking as well as instructive. He first describes ndicitis and then its surgical treatment. His technique is nd criticism. He describes it step by step, dividing the opera-by his famous inch and a half incision into seven steps. Each is minutely detailed and a reason given for each section or ivision thereof.

Iorris's results are surprisingly good. He publishes a table of cases—his first series—with eight deaths. His later series even fewer fatal cases.

'aken altogether, this is one of the most instructive mono-hs upon appendicitis that we have had the privilege of exam-. About one-half of this book is devoted to the consideration her subjects, but its chief interest centers around appendicitis. t must be confessed there are many practical surgical hints in otes, that comprise about one-half the volume.

'he book is printed on plate paper and is handsomely illus-d. It should be found on the table of every practical surgeon.

BOOKS RECEIVED.

The Principles and Practice of Medicine. Designed for the use of Practitioners and Students of Medicine by William Osler, M. D., Fellow of the Royal College of Physicians, London; Professor of Medicine in the Johns Hopkins University and Physician-in-chief to the Johns Hopkins Hospital, Baltimore, etc., etc. Octavo, pp. xvi.—1,143. Second edition. New York: D. Appleton & Co. 1895.

An American Text-book of Obstetrics for Practitioners and Students. Richard C. Norris, M. D., Editor, Robert L. Dickinson, Art Editor. Royal 8vo, pp. 1009. With nearly 900 colored and half-tone illustrations. Price, $7, cloth; $8, sheep; $9, one-half Russia. Philadelphia: W. B. Saunders, 925 Walnut street. 1895.

Dunglison's Dictionary of Medical Science. Twenty-first Edition, with Appendix. By Robley Dunglison, M. D., LL.D., late Professor of Institutes of Medicine in the Jefferson Medical College of Philadelphia. Edited by Richard J. Dunglison, A. M., M. D. New (21st) edition, thoroughly revised, greatly enlarged and improved, with the pronunciation, accentuation and derivation of the terms. In one magnificent imperial 8vo volume of 1225 pages. Cloth, $7; leather, $8. Thumb-letter index for quick use, 75 cents extra. Philadelphia: Lea Brothers & Co., Publishers. 1895.

Functional and Organic Diseases of the Stomach. By Sidney Martin, M. D., F. R. S., F. R. C. P., Assistant Physician and Assistant Professor of Clinical Medicine at University College Hospital; Assistant Physician to the Hospital for Consumption and Diseases of the Chest, Brompton. Octavo, pp. xvi.—505. With fifty-seven illustrations. Edinburgh and London: Young J. Pentland. Philadelphia: J. B. Lippincott Co. 1895.

Transactions of the State Medical Society of Wisconsin for the Year 1895. Volume XXIX. Constitution and by-laws and list of members. Charles S. Sheldon, M. D., secretary. Madison, Wisconsin: Tracy, Gibbs & Co., Printers and Stereotypers. 1895.

Transactions of the Colorado State Medical Society. Twenty-fifth annual convention, held in Denver, Col., June 18, 19, 20, 1895. By-laws and list of members. Edwin R. Axtell, M. D., secretary. Denver, Col.: Published for the Society.

New York State Commission in Lunacy. Sixth Annual Report, October 1, 1893, to September 30, 1894. T. E. McGarr, secretary. Transmitted to the legislature May 24, 1895. Albany: James B. Lyon, State Printer. 1895.

A Manual of Operative Surgery. By Lewis A. Stimson, B. A., M. D., Professor of Clinical Surgery in the University of the City of New York. New (3d) edition. In one royal 12mo volume of 614 pages, with 306 illustrations. Cloth, $3.75. Philadelphia: Lea Brothers & Co., Publishers. 1895.

Pediatrics, the Hygienic and Medical Treatment of Children. By Thomas Morgan Rotch, M. D., Professor of the Diseases of Children, Harvard University. Royal 8vo, pp. xii.—1,124. Illustrated. Philadelphia: J. B. Lippincott Company. 1895.

Supplement to the International Encyclopedia of Surgery. Edited by John Ashhurst, Jr., M. D., LL. D., Philadelphia. One royal 8vo volume, of 1,136 pages, illustrated by numerous wood-engravings and a chromo-lithographic plate. Cloth, $7.50; leather, $8.50. To sub-

rs to the entire set, cloth, $6; leather, $7, and half morocco, $8. ork: William Wood & Co. 1895.

egnancy, Labor and the Puerperal State. By Egbert H. Grandin, Consulting Surgeon to the New York Maternity Hospital; Con- Gynecologist to the French Hospital, New York, etc.; and George rman, M. D., Obstetric Surgeon to the New York Maternity Hos- Gynecologist to the Cancer Hospital, New York, etc. Illustrated, orty-one (41) original full-page photographic plates from nature. 8vo, pp. viii.—261. Cloth, $2.50 net. Philadelphia: The F. A. Co., Publishers, 1914 and 1916 Cherry street. 1895.

anual of Gynecology. By Henry T. Byford, Professor of Gyne- and Clinical Gynecology in the College of Physicians and Sur- of Chicago; Professor of Clinical Gynecology in the Woman's al School of Northwestern University; Professor of Gynecology Post-Graduate Medical School of Chicago. Octavo, pp. xii.— ontaining 234 illustrations, many of which are original. Price, Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street.

andbook of the Diagnosis and Treatment of Skin Diseases. By r Van Harlingen, Ph. B. (Yale), M. D., Emeritus Professor of Der- gy in the Philadelphia Polyclinic; Dermatologist to the Howard al. Third edition, enlarged and revised. Small 8vo, pp. xvi.— Sixty illustrations, several of which are in colors. Price, $2.75. elphia: P. Blakiston, Son & Co., 1012 Walnut street. 1895.

Manual of Syphilis and the Venereal Diseases. By James Nevins A. M., M. D., Professor of Skin and Venereal Diseases, Rush al College; Dermatologist to the Presbyterian, Michael Reese ugustana Hospitals and Consulting Physician to the Hospital for n and Children, Chicago; and Frank H. Montgomery, M. D., er on Dermatology and Genito-Urinary Diseases and Chief ant to the Clinic for Skin and Venereal Diseases, Rush Medical e; Attending Physician for Skin and Venereal Diseases, St. eth Hospital, Chicago. Small 8vo, pp. 618. With forty-four ations in the text and eight full-page plates in colors and tints. $2.50. Philadelphia: W. B. Saunders, 925 Walnut street. 1895.

ateria Medica and Therapeutics. A Practical Treatise, with al Reference to the Clinical Application of Drugs. By John V. aker, A. M., M. D., LL. D., Professor of Materia Medica, Phar- gy, Therapeutics and Clinical Medicine, and Clinical Professor eases of the Skin in the Medico-Chirurgical College of Philadel- Physician to the Medico-Chirurgical Hospital, Philadelphia, etc., Third edition, thoroughly revised. Reset with new type and d from new electrotype plates. Royal 8vo, pp. ix.—1,108. Extra $5 net; sheep, $5.75 net. Philadelphia: The F. A. Davis Co., hers, 1914 and 1916 Cherry Street. 1895.

actical Urinalysis and Urinary Diagnosis. A Manual for the Use ysicians, Surgeons and Students. By Charles W. Purdy, M. D., 's University; Fellow of the Royal College of Physicians and ons, Kingston; Professor of Urology and Urinary Diagnosis at hicago Post-Graduate Medical School. Second revised edition. numerous illustrations, including photo-engravings and colored . In one crown 8vo volume, 360 pages. In extra cloth, $2.50 Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 y street. 1895.

Literary Notes.

THE Complete Farrier and British Sportsman is the title of a curious old quarto volume owned by Mr. George Urban, Jr., of Buffalo, and which we have had the privilege of examining. The author is Richard Lawrence, veterinary surgeon, and it is published by Thomas Kelly, 17 Paternoster Row, London, 1833. It announces on its title page that it is a systematic enquiry into the structure and animal economy of the horse, the causes, symptoms and most approved methods of prevention and cure of all the diseases to which he is liable. It includes a faithful delineation of the various dogs used in the sports of the field, with canine pathology. It is interspersed with sporting anecdotes and an account of the most celebrated horses and dogs, and is embellished with a series of engravings executed by eminent artists from original drawings in the possession of noblemen and gentlemen of the turf.

The volume is full of interesting reading and shows the status of veterinary science sixty years ago.

THE *New Orleans Medical and Surgical Journal* for November published our obituary notice of Louis Pasteur in full, courteously giving us due credit.

In marked contrast, the *American Journal of Ophthalmology* published our obituary notice of Dr. Henry W. Williams in full in its October number, for which it did not give us credit. Lest the vision of our ophthalmic contemporary may be defective we respectfully invite its attention to the fact that this journal is copyrighted.

THE HODGKIN PRIZE PAID.—J. R. Roosevelt, secretary to the United States embassy, London, has presented to Lord Rayleigh and Professor Ramsay the check of the embassy for $10,000, being the Hodgkin prize awarded by the Smithsonian Institution, of Washington, for their discovery of new properties in the atmosphere. The recipients of the prize have written a letter of thanks to the Smithsonian Institution.

THE *Ladies' Home Journal* has set an example which our so-called religious papers should, but will not, follow. This magazine, one of the most widely circulated of all American periodicals, declines all advertisements of a "medical, remedial, or curative nature,"

m an unwillingness to assume any degree of sponsorship for
thing that might be improperly suggestive or that, used by the
orant, might do harm. It would be a relief, indeed, to pick up
nurch paper in which one could read without encountering the
vertisements of all kinds of charlatans with their pills "for the
ulation of" this or that and the suggestive "removal of
tructions," and others containing advertising lies which the
tors of the papers cannot fail to recognise as lies. Did you ever
d the denunciation of a medical fraud in a religious newspaper?
Ohio Medical Journal.

E Alvarenga prize for 1895 has been awarded to Dr. Guy Hins-
e, of Philadelphia, for his essay entitled Syringomyelia. The
t award of the Alvarenga prize, amounting to about $180, will
made on July 14, 1896, provided that an essay deemed by the com-
tee of award to be worthy of the prize shall have been offered.
Essays intended for competition may be upon any subject in
dicine, but cannot have been published, and must be received by
Charles W. Dulles, the secretary of the college of physicians,
or before May 1, 1896.

E College of Physicians and Surgeons, of Chicago, through its
retary, Dr. Bayard Holmes, has made an offer to the Women's
ristian Temperance Union, which, in substance, is to erect a $150,-
) building under such conditions that payment will be easy. The
itation to accept the offer came at a reception tendered Miss Fran-
Willard by the board of managers of the National Temperance
spital. The proposition from the college is to furnish the W. C.
U. with a hospital, which shall be conducted under its auspices
l on the same lines as is the hospital now under its management.
committee has been appointed to consider the proposition and
ort at an early date on the feasibility of its acceptance.

E state lunacy commission has made provision for the publi-
ion of a quarterly medical journal, to be issued from the Utica
te Hospital, beginning in January, 1896. The contributors are to
lude the superintendents and assistant physicians in the state
spitals for the insane.

SSRS. LEHN & FINK have issued a well-printed brochure of
enty-eight pages, giving interesting and valuable information
ncerning antitoxins, vaccine virus and other biological products

of the biological and vaccinal department of the New York Pasteur Institute. It contains clinical reports on results obtained from these products as well as detailed directions as to dosage and treatment, besides much other information of value relating to these products. Physicians addressing the above firm, P. O. Box 3083, New York City, may obtain the pamphlet free.

THE *Medical and Surgical Register* of the United States, published by R. L. Polk & Co., Detroit, Mich., is about to make its fourth appearance on the same general lines of construction as heretofore. It will, however, be considerably enlarged and brought forward to cover the necessities of the present. It is the most useful medical register extant.

PEDIATRICS, a new journal owned by Dr. Dillon Brown, of New York, and edited by Dr. George A. Carpenter, of London, has made its first appearance. It is published twice a month by the Van Publishing Company, of New York.

THE *Cleveland Medical Gazette* begins a new volume with its November issue, 1895, in a new dress. It is enlarged in size and every way improved in appearance with a view to keep pace with the progress of the age.

THE *Canada Medical Record* has put on a new dress and reduced the size of its page to standard octavo. The new editor-in-chief, Dr. J. Bradford McConnell, seems to be infusing the *Record* with new energy.

Miscellany.

REMOVAL.—Dr. Charles Sherman Jewett, of Buffalo, has removed his office and residence from 153 Woodlawn avenue to 892 Main street. Hours: 8–10 A. M., 2–3 and 7 P. M. Sundays, 8–10 A. M., 3–4 P. M.

ST. LUKE'S HOSPITAL, New York, is about to obtain an endowment for its pathological department in the sum of $200,000. Resolutions looking toward this end were introduced by George Macculloch Miller, president of the board of managers, at a recent meeting. Responses came so prompt that Mr. Miller is quoted as saying that the desired endowment is already a fact actually accomplished.

Buffalo Fresh Air Mission Hospital at Athol Springs on the Lake Shore.

FFALO MEDICAL JOURNAL.

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Original Communications.

ERNING THE SYMPTOMATOLOGY AND TREAT-ENT OF INFANTILE DIARRHEA AT THE BUF-FALO FRESH AIR MISSION HOSPITAL.[1]

By IRVING M. SNOW, M. D., Buffalo, N. Y.,

r in diseases of children, University of Buffalo; physician to Buffalo Fresh Air Mission Hospital; member American Pediatric Society.

IS paper will deal with the experience of the writer in the treatment of infantile diarrheas at a lake shore hospital. ject is to describe some of the many phases of the dyspep- inflammatory diarrheas of children and to discuss their ical, dietetic and climatic treatment. My patients were at the Buffalo Fresh Air Mission Hospital, which is charm- situated on the lake shore at Athol Springs, ten miles from . The buildings are new, conveniently planned and stand edge of a bluff overhanging Lake Erie. The institution is quipped with apparatus, possesses resident physicians and nurses, and is reached in twenty-five minutes from the city. the courtesy of my colleague, Dr. Dewitt H. Sherman, I e to report the entire service of the hospital. We are accus- to divide our cases into two classes: 1. (*a*) Those children e suffering from diarrhea caused by the irritation or non- ation of food—dyspeptic diarrhea. (*b*) Where fever, vomit- purging were present from bacterial poisoning, but no inflammatory or necrotic process had taken place—mycotic a. Dyspeptic and mycotic diarrhea, forty-one cases, three 2. Inflammatory diarrhea, ileo-colitis, acute or prolonged ourse. With these cases there was pronounced intestinal —congestive, inflammatory, ulcerative—ninety-three cases, deaths. Total number of cases received into the hospital 4-1895, 138; deaths, twenty-one; excluding the patients

[1] ead at the twenty-eighth annual meeting of the Medical Association of Central , at Syracuse, October 15, 1895.

who died in twenty-four hours (eight), the mortality was 10 per cent.

The history of our cases was a monotonous recital of the effects of hot city air and of artificial feeding. As the patients were generally improperly fed through the entire year and as the cholera infantum season opens about the last of June or the first of July, we are inclined to believe that summer heat is the chief etiological factor. To attain its full morbific effect the high temperature must be continuous for several days and nights. Practically, here all of the cases received into the hospital in 1895 sickened in the last week in June, when the weather was unusually warm. Some of the children were at once acutely ill, the rest showed signs of failing health—gastro-enteric dyspepsia, with recurring diarrheas of more or less severity until they were removed to the hospital. The usual explanation of the derangements for the gastro-enteric tract in summer is to us sufficient, viz.: that the heat lowers the digestive powers of the child and produces poisonous changes in the food. The first heat of July is most depressing and malignant. The diarrheas of the latter summer have always seemed to the author less severe and more easily cured.

Total deaths in hospital in July, 15 ; August, 5 ; September, 1. In Buffalo, deaths from infantile diarrheas for two years, July, 429 ; August, 324 ; temperature, July, 1894, 71° ; August, 1894, 67° ; July, 1895, 68° ; August, 1895, 69°.

It is, of course, possible that the weaker children die at the beginning of the hot season.

In reviewing the previous dietary of infants ill with diarrheal disease, we may conclude that no artificial food gives immunity from illness ; even changes in hot weather from a poor food to one better may produce a diarrhea. Children sicken on condensed milk, cow's milk—sterilised and unsterilised—Liebig's and dried milk foods and broths. Moreover, the digestion seems to undergo a complete transformation in hot weather. Babies may be given articles of adult diet in cool weather and thrive. In July and August they die from the same menu. Our cases had usually received a variety of foods, tried by the mother in despair at her child's persistent vomiting, diarrhea and emaciation. The articles given were sometimes theoretically correct. Thus sterilised milk and cream or whey occasionally caused protracted dyspeptic diarrheas. There is a lowered ability to digest cow's casein in summer. Not more than 1 per cent. should be present in any food given to a

ess than nine months old. After loose passages and vomit-
ve commenced, it is nearly impossible to make the baby
cow's casein again until cool weather. Nevertheless, the
has seen more city children in summer thrive on cream and
r cream and whey mixed, perhaps, with Liebig's food, than
ner mixture. The various patent powdered foods, rich in
and poor in fats, seemed sometimes to be the cause of severe
ting diarrheas. A bottle-fed baby generally shows a loss of
e and has a stationary or diminishing weight some days
the diarrhea begins. Errors in feeding are not always due
ernal ignorance. Women in all ranks in life are glad to
and carry out intelligent professional advice. The physi-
nstructions are too often confused and show indifference
k of knowledge. Institution children from asylums and
nses, although apparently well fed, succumb easily to sum-
rrheas. They lack a mother's constant attention and the
loor life enjoyed by the children of the well-to-do.

make clean-cut classifications of the various kinds of
e diarrheas is difficult, as acute mycotic diarrhea may change
ileo-colitis, and the slow convalescence from an inflamma-
rrhea is the clinical picture of a dyspeptic diarrhea.

ically considered our cases showed the following symptoms :
Dyspeptic Diarrhea.—A large number of infants were
l with normal temperature or trifling fever. They had
been fed on several kinds of food—cow's milk, dextrine
ondensed milk, and the like. Their condition was fairly
They vomited occasionally and had from five to ten stools
r a week or two. The passages were watery, green or brown,
ng principally of the débris of food. These diarrheas
holly due to indigestion and commonly disappeared after
al irrigation and careful feeding. None of these cases
et it is probable that had they been left in the city many
ave perished, as the history of our fatal cases showed that
them had previously had a dyspeptic diarrhea. Hence, a
speptic diarrhea may easily become an ileo-colitis. These
should be kept in the country and be carefully fed until
ather.

Mycotic Diarrhea.—This phase of gastro-enteric disease
grafted on a dyspeptic diarrhea, or may begin abruptly in
, apparently healthy baby. The patient is at first fretful,
perature rises rapidly to 104° or 105°, and there may be fifteen

to twenty green or brown fetid stools in twenty-four hours. Very quickly the child becomes exhausted and the patient is brought to the hospital in a collapsed condition, with a high internal temperature. Three deaths were recorded dying with these symptoms, one with the white serous stools of cholera infantum. The convalescence from acute mycotic diarrhea is slow, the child having sometimes loose passages and irregular fever for weeks.

3. *Ileo-colitis with Marked Inflammatory Changes and Ulceration in the Ileum and Colon.*—(*a*) Ileo-colitis may commence with a fierce acute onset, continuous high temperature, frequent stools of mucus, sometimes mixed with blood ; there is frequently tenesmus, rarely persistent vomiting. The little patients sink rapidly, victims of an intense toxemia. The high fever can only be lowered by brute force, through cold baths and cool irrigations. Enormous doses of stimulants are necessary to sustain the failing heart. Our cases of ileo-colitis lasted from four to ten days. About one-third died. Those recovering made a slow convalescence, the fever and mucous stools recurring again and again. Generally from 15 to 30 per cent. of the weight was lost in four or five days. The author saw three cases of ileo-colitis in well-to-do families die with these symptoms last summer. The patients were under the best hygiene, correctly fed, and the dangerous nature of the illness was recognised early. They seemed to have received a lethal dose of some unknown poisonous germ.

(*b*) Again, intestinal inflammation may develop more insidiously. Children entered the hospital who had been ill ten to twelve days, with six to eight passages of mucus, blood and undigested food a day. They were indifferent to their food, had low irregular fever ; now and then the temperature would rise to 104° or 105°, and the number of stools would increase and diminish independent of medication or diet. The fatal cases, toward the end, had a high temperature and failing heart. They died, apparently, from a toxemia, and not from the diarrhea, which was generally moderate and not enough to cause much depression. The vagaries of the temperature chart sometimes suggested malaria, but in the most pronounced of these cases the plasmodi malariæ were not found. Most of these cases got well, yet a prognosis was a hazardous matter, as one of the most unpromising cases recovered, and a child whose improvement we regarded very complacently as a result of good treatment, died suddenly with a high temperature, although it had but three stools in twenty-four hours. Ninety-three cases of ileo-colitis, fifteen deaths.

We received a number of children from asylums whose
ls showed a high summer mortality. These babies were
weight and rachitic. There was practically no diarrhea—
four passages of undigested food a day—they were indiffer-
their food and some subject to mysterious attacks of fever.

Occasionally children in the last stage of atrophy were sent
hey were rachitic, generally had a bronchitis, were apathetic,
lt to feed. Two deaths were recorded from this condition.
abies had a few loose passages and died very suddenly.

Infantile diarrhea may be septicemic, the blood poisoning
ed in the gastro-enteric tract. The author saw, in June, a
f intestinal septicemia whose chief symptom was numerous
of mucus and blood. No case of this kind was received into
spital.

ith many of our cases the gastro-intestinal diseases were com-
d by other conditions. Rachitis played an important rôle in
terioration of the child's health. Of 138 cases in two years,
cent. were rachitic. An acute illness in a rachitic baby is
a serious matter. The ability of an infant to withstand
rrhea or a pneumonia depends often on the presence or
e of rickets. It should be remembered that there are fat
and thin rickets.

convulsion during a diarrhea is a complication of evil omen.
ases suffered from eclampsia, two died of ileo-colitis, one
cotic diarrhea.

easles.—Three patients were received who were recovering
neasles; one died. French authors have repeatedly empha-
hat ileo-colitis occurs as a complication, but more frequently
quel of measles.

onchitis, Broncho-pneumonia.—About one-fourth of our cases
d pulmonary symptoms, generally a subacute bronchitis.
cases of well-marked broncho-pneumonia were discovered;
ied. M. Sevestre has described a class of pneumonias of
nal origin, due to infection of the pulmonary tract by intes-
acteria. The avenues of infection are the blood or lymph
els, or, possibly, by inhalation of air polluted by the exhala
of the stools. It is certainly a common and unfortunate
for a child with an ileo-colitis to develop broncho-pneumonia.

in diseases.—Eczema, impetigo contagiosa, scabies, were
t in perhaps 15 per cent. of our cases. Involving small
the eruption is of little consequence. If there be an uni-

versal eczema, or if there be much pustular inflammation, a diarrhea is of serious import, being probably due to septic absorption from the skin. The author saw a child, with extensive eczema since birth, die after an illness of twelve hours. During this time he had trifling fever, vomited once and had four moderately sized colorless stools. Death caused by a toxemia from absorption from the skin.

Hutinel has made some interesting observations on cutaneous infections with children. The skin is a reservoir for germs and may affect the system by absorption or inhalation. He traced several fatal diarrheas to the presence in the blood of staphylococci from impetigo or pustular eczema.

Prognosis.—In the light of my hospital experience the course of no infantile diarrhea can be accurately foreseen. No case is too insignificant to be neglected, no case too desperate to be abandoned. A child is fortunate who enters the summer in good condition. Babies who are under weight, who suffer from chronic vomiting or from undigested stools, will almost certainly be ill in July or August. All cases of diarrhea with persistent fever are dangerous; frequent mucous stools, whether of pure mucus or mucus mixed with blood, indicate an intense infection.

Dyspeptic diarrheas are generally amenable to treatment; mycotic diarrheas do well if not overfed. The ileo-colitis, of slow onset and irregular fever, usually offers a favorable prognosis. It is, of course, understood that the prognosis is always better among the children of the well-to-do than among the wasted, neglected offspring of the city poor. Beyond the second year there is a relative immunity against severe diarrheal disease. Only four of our twenty-one fatal cases were over two years old.

Treatment.—Nearly all of the cases received at the Buffalo Fresh Air Mission Hospital had been under treatment several days. Frequently the children were sent out moribund; thus eight of twenty-one fatal cases died in twenty-four hours. A large number of babies arrived collapsed, with excessively weak heart and high temperature. They were bathed, freely stimulated, put in a quiet place and generally after a time revived.

The diarrhea treatment is (1) dietetic, (2) medicinal, (3) mechanical or local.

(1) Practically the only medicines producing positive effects were opium and bismuth subnitrate. The deodorised tincture of opium was used in small doses, frequently repeated. Opiates

l be cautiously given to children with a high temperature or ted apathetic infants. Bismuth was prescribed in massive given at short intervals. The vegetable and mineral gents were not used by the mouth. After repeated trials of -called intestinal antiseptics—salol, naphthaline, beta-naph- beta-naphthol-bismuth,—the staff have grown sceptical as to utility. Calomel and sodium salicylate may be excepted his list.

eat reliance was placed upon intestinal irrigation. In a number of cases of dyspeptic and inflammatory diarrhea this lure seemed positively curative. The entire large intestine cuated and cleansed. The hot currents of water in the intes- ave a soothing, sedative effect upon a restless, fretful baby. is a direct antiseptic and astringent action upon the con- and ulcerated mucosa of the colon. Borax was mixed in ter if the feces contained much mucus. If astringents were ted, 1 to 2 per cent. solutions of tannic acid were employed. saturated solutions of boric acid were given if the diarrhea oxemic. The amount of fluid used in the irrigation was two to four quarts once or twice a day. Permanent depres- as not observed after this treatment; in fact, the irrigation l the best mode of overcoming collapse. Generally, after estinal flushing, the number of passages would diminish and rrhea, *per se*, was not a difficult symptom to treat.

miting.—Vomiting was most frequent in acute ileo-colitis mycotic diarrhea and in chronic gastric dyspepsia. All with diarrhea vomit occasionally. We did not consider it ult symptom to treat, except in the habitual regurgitation ntile atrophy. The stomach was washed out. After some a peptonised cream and milk or cream and whey, well diluted, ken broth was administered in small quantities. Calomel gent of some value to an irritable stomach.

per.—Of all problems in the diarrheal diseases of children, cessful treatment of high temperature is the most difficult e. A persistent high temperature, 104° to 105°, in an ileo- is a sign of impending danger. A steadily rising tempera- chronic diarrhea or in dyspeptic, wasted infants, is of grave ance. Excepting the administration of sodium salicylate, as an intestinal antiseptic and antipyretic, the treatment of n the hospital was by hydrotherapeutics. The temperature e reduced in three ways :

1. By sponging with cold water. The sponge baths could be frequently repeated if the temperature arose again. This procedure was soothing and generally relieved the fevers of dyspeptic diarrhea or chronic ileo-colitis. Failing with this, we had recourse to cold baths or cool irrigations.

2. The cold baths were useful in acute ileo-colitis or in mycotic diarrheas. Our patients were placed in water at 95° and the bath was then lowered to 85° or 80°. The temperature was frequently taken in the rectum and the patient removed from the bath when the thermometer recorded 101.5°, as the fever sunk rapidly after removal from the water. If the patient seemed depressed it was stimulated by the mouth or hypodermically. No serious after-effects were observed, although the radial pulse was apt to become thready from vasomotor contraction. The baths lasted from five to seven minutes.

3. Cold irrigations. Children with high rectal temperature, collapsed, with cold extremities, were stimulated hypodermically. The trunk and extremities were wrapped in hot flannels, and a cool irrigation, 80° to 95°, was given. The water was hot when it returned from the bowels. The temperature rapidly sunk and often did not again ascend.

The Question of Stimulation.—To nearly all cases of acute or chronic diarrhea, where alcohol did not cause vomiting, whisky was freely administered. The effects were usually beneficial; indeed, most of our cases were received in a condition of extreme exhaustion. Strophanthus, strychnia and caffein were frequently employed. Strong coffee often had a happy effect when the apathetic condition of the child seemed to contraindicate alcohol. Hypodermic stimulation was of great service in sudden cardiac depression or when we apprehended vomiting. Hypodermic medication is too little used in children. An apparently moribund infant may be saved occasionally by a timely hypodermic of strychnia, digitalis, caffein or whisky.

Feeding.—The proper feeding of infants, with diarrheal disease, is the key of the whole treatment. Intestinal lesions progress with the administration of indigestible food. They often heal with great rapidity if correct dietetics be employed. These children, nevertheless, often show great repugnance to food. The food prescriptions which seemed of greatest value at the Buffalo Fresh Air Mission hospital were peptonised milk, broths and beef juice. Mixtures of cream and milk, peptonised and well diluted, and

n and whey were usually well taken and easily assimilated. are best cautiously prescribed at first, one or two feedings a until a tolerance is established. Fresh beef juice may be nistered at the same time or separately. Prepared according eadle's formula, it contains 8 per cent. of albuminoids. It iven to the children pure or diluted with three to four times lk of water.

alue of Country Air.—It is nearly impossible to keep an cially fed infant well during the hot season, except in the ry. It is equally difficult to cure dyspeptic or inflammatory hea during July or August in a city house. In the country ppetite is apt to increase and all of the symptoms usually orate, yet the improvement is not always instantaneous, cal. Ileo-colitis and cholera-infantum are not immediately by removal from the city.

Ve think that physicians often err in stating to parents that baby will immediately recover if sent to the lake shore or a and that nothing else is necessary. The result is often dis- us and disappointing, for, with even Eden-like surroundings, ttle patient may be harassed by recurring fever, vomiting and hea. Prolonged residence is necessary. The fresh air should sociated with skilful nursing and medical attendance. Hence reat value of lake shore hospitals like the institutions at Athol gs and Charlotte.

6 Franklin Street.

OBSERVATIONS ON GENERAL PARESIS.

By F. H. STEPHENSON, M. D., Syracuse, N. Y.

ILL invite your attention for a few moments to the considera- on of general paresis of the insane, with reports of several which have fallen under my observation, presenting many s, some having been seen in their incipiency, when but physical or mental change was recognisable.

he question is often asked, Does general paresis exist with- ental disorder? I have seen several cases which continued onths without exhibiting mental deterioration and I have reports of many others; but I know it is the accepted on that mental changes are found in most instances, before

Read at the twenty-eighth annual meeting of the Medical Association of Cen- v York, October 15, 1895.

death, though often presenting symptoms only of weak-mindedness and little importance is attached to them.

The rapidity of degeneration and the amount of mental loss in a given time, of course, varies. According to Savage, the disease is special in so far that it ends fatally in nearly all cases and whatever the earlier symptoms may have been; those of the later stages are similar to a remarkable degree. Remissions do occur and patients improve to so great an extent that they are discharged from hospitals, and if they lead a quiet life they remain well for months, but usually not over a year. If they engage in active pursuits the breakdown comes sooner and a second return to health rarely occurs. The greatest importance attaches to the early stages, for if anything is to be accomplished in treatment it is at this time. A paretic will make unreasonable investments bringing on financial ruin and his condition not be recognised until his financial fall. Friends say his losses caused him to lose mental balance, when, in reality, his mental failure preceded and was the cause of his wrecked finances. On this account early attention and proper restrictions should be made.

The prodromal symptoms are of vast importance, enabling us to make an early diagnosis. They may be physical or mental. Headaches and attacks of vomiting often precede this disease. When head-pains of a variable kind occur with men usually strong, unless of strongly neurotic families, it is well to be guarded in the diagnosis. If with such men there is a cessation of business and family cares, the onset of paresis can often be deferred. Word blindness and word deafness or over-acute hearing are sometimes met with; clipping of words or letters; difficulty in pronunciation; slurring them over indistinctly; tremor of the tongue and facial muscles, especially about the mouth; over-action and twitching of the occipito-frontalis—these are all suspicious symptoms.

Dr. Gray suggests extending the arm and leg, then letting them rest on your hand, will readily reveal a tremor, which, in many cases, has not been observed. The wrist and knee reflexes are exaggerated, though rarely are they diminished. I have observed that the pupillary alterations are frequent and vary greatly, some being irregular in their marginal contour, some dilated. Rarely are they contracted; often one is larger than the other; there may be sluggish reaction to light and often they do not react to accommodation. Ataxic gait develops, also ataxic movement of the upper extremities, which is well shown by having

atient close his eyes, extend and swing his arm, then suddenly im to touch the end of his nose with the index finger. I repeatedly seen this incoördination thus brought out.

With the physical symptoms we earlier or later observe mental ges, as great irritability, forgetfulness, marked extravagance, ularities in business matters and suspicion, until the patient lops the second or maniacal stage. In this stage the mental toms increase; there are stupor and delusions of a grandiose acter, the patient imagining himself very rich and powerful, eing too dull to reason his point. This form differs from the a of paranoia where the delusions are sustained by argument. is stage they often become violent and die of exhaustion, or nit suicide, especially if at all melancholic.

n the third stage or stage of dementia they become foolish and showing lack of all mental process.

Duration.—These cases average, according to many reports h I have gathered, about two years. This applies more tly to those of whom a specific history was given, though some live from four to six years after the earliest noticed symp-. Convulsions may occur during the disease. In some of ases there was but slight mental change noticed until after the ulsions appeared; in fact, in one case it appeared to be the t and there was no recurrence of convulsions until within a hours of death, which occurred nearly a year after the first k. With this man the symptoms were largely physical—there mental enfeeblement, but no delusions or ideas of grandeur.

Any condition which may start a decay of the higher nervous e will give rise to symptoms which resemble those of paresis. ever, it may be a matter of accident whether this be due in irst place to disease of arteries, to malnutrition with constant n or changes in relation between brain and blood-vessels.

Regarding the relationship between syphilis and general para-, I have found several cases reported where that disease was wed in both husband and wife by paresis. I have had under rvation for some time two women who suffered from Jackson-epilepsy, both having had syphilis. The spasms yielded ely to specific treatment; their husbands had both had syphilis have recently died of general paralysis.

The question regarding etiology often arises, but what is gen-paresis? Certainly it is a premature irregular dissolution, ring from senility in its irregular manifestations both

mental and physical, the changes in some cases being rapid, in others explosive, while some are very slow and present marked remissions. An imperfect brain, either hereditary or from congenital causes or imperfect development, it appears to me, must be the first condition in resultant degeneration in a large number of paretics. Although this statement is probably doubted by many observers, I cannot see why the many causes given—namely, syphilis, intemperance, overwork, worries, bodily diseases or infirmities, traumatism and exposure, may not be the excitant ones, as I believe they are in many cases, though not the primary causes in all.

We often meet with paretics in whom all of these familiarly so-called causes are absent and their histories differ greatly, some presenting mere physical changes with little mental disturbance, others in whom the ego is wonderfully altered and exalted with little physical deterioration. Some asylum statistics, I am aware, go to prove Morel's early statement that heredity or a strong neuropathic constitution does not enter largely into the etiology of paresis. Regarding the temperature changes, I think most carefully prepared statistics have proven that the principal variations are due to different forms of paresis, but more especially to the development of some intercurrent affection as inflammation of the respiratory tract, bed sores or the onset of convulsive seizures.

One very interesting and I might say typical paretic whom I observed for three years, during the entire duration of his disease presented a most remarkable pulse. At intervals during the first three months of illness the beats dropped to thirty per minute and so continued for two or three hours each time. Severe epistaxis was also frequent in this case, though the heart failures were not associated with the hemorrhages, occurring frequently on different days. It was probably due to some derangement of the cranial branches which help to form the cardiac plexus, as there was no apparent valvular disease, though such is often found where syphilis is associated if not the cause, as was the condition in this patient. I have had some very interesting cases of general paresis under treatment, combining also tabetic symptoms in the legs. In one the arms, head and tongue presented the jerky incoördination of disseminated sclerosis. As yet there has been no opportunity of demonstrating the two lesions.

The history and symptoms are as follows:

Mrs. W., aged 45; married; no children. Family history negative, so far as I could learn. Previous health always good until one year ago,

she had la grippe; since then never well. The first and most
ctive sign was the marked tremor of the head and exaggerated or
ction of the facial muscles when she attempted to speak. There
almost a snapping of the jaws. Loss of memory; very nervous
restless, but fairly intelligent. Says she sees shadows following
nd hears voices talking to her, which two latter symptoms are very
stive of insanity. There was no swaying of the body with the
closed. She could walk, also walk well, when the eyes were
. Good grip; ataxia of the upper and lower extremities; knee-
absent. Her family say she was formerly always good-natured,
as become fretful and is often very irritable. She is very weak
as headaches very often in the morning, but during the day they
pear and she feels stronger. Sleeps well; no vomiting; good
ite; at times very stupid and stumbles when walking. In this
the flushings of the face and pallor, vasomotor phenomena, are
marked.

f fourteen *postmortems* held during the past year and reported
Dr. F. C. Sawyer, of the St. Lawrence State hospital, the cal-
were thickened in seven cases; thin in three cases; firmly
rent in three cases; the condition in the fourteenth not men-
d. The dura was thickened in seven cases; firmly adherent
ree cases; the condition not reported in the remaining four.
pia was thickened in five cases; increased and adherent ves-
n four cases; opaque in one; attenuated and anemic in one
The arachnoid was thickened, opaque, infiltrated and dis-
d with fluids in about half the cases. The cortex was quite
rally softened, with but little atrophy and irregularly located
ons on all the convolutions of the vertex; the basial ganglia
and olfactories were softened. Also an overgrowth of the
oglia, and atrophy of the cells and nerve fibers of the gray mat-
ventricles enlarged; vascularity increased. The lumen of the
ls is diminished, the muscular coat hypertrophied and partially
ysed and degenerated, allowing extravasation of blood into
unding tissues. Development of spider cells, which prolifer-
nd develop, according to Lewis, into scavenger cells. The
ht of the brains was given, the variation being from thirty-
to fifty-three and one-half ounces. In the spinal cord
ges were found similar to those in the brain. The posterior
nisure, the columns of Goll and Burdach, are most often
ted and present the changes of descending degeneration.
thesia of the skin is occasionally present and, as Dr. Burns
d, leads to self-mutilation. Patients think the limb or por-

tions of the body affected is dead or a foreign body. One of my patients wished his limb taken off, insisting it was a fish leg.

A few cases of Charcot artropathies have been reported in general paretics. I saw one in the National hospital of London, associated with paresis and tabes dorsalis, and recently one in the St. Lawrence State hospital in Ogdensburg. In the latter case ptosis of the left eyelid also was present with the Charcot lesion of the left knee. It was a transferred case, the early history of which was not at all satisfactory, and as the patient was in the last stages of paresis, his information regarding development was valueless. Optic atrophy I have also observed in three cases causing blindness; this I think is rare before the latter stages. The pathological changes in the thoracic and abdominal cavities vary greatly, though Julius Mickel reports pulmonary disease in nearly 90 per cent. of his autopsies. There are some resemblances between paresis and other forms of insanity, but with the patient's previous history and a careful analysis of the symptoms, a diagnosis can be arrived at when the proper management of our patients can be prepared for.

An ataxic gait with absence of the tendon reflexes and pupils which contract to light, but not to accommodation, will suggest tabes; but if with these symptoms there is mental enfeeblement and hesitating speech, general paresis should be suspected and especially so when the lightning pains are absent. Again, disseminating sclerosis presents some similar symptoms, though the tremor is much coarser and there is more often nyatagmus; there is not so marked ataxia and the mental symptoms appear much later. Paralysis agitans presents a plainly marked picture when one has studied these cases. I have diagnosticated several of these cases before the tremor began to show itself. The peculiar bent attitude, slow speech, the characteristic way of carrying the hand partially bent, bringing the thumb and finger together (this joint and others become fixed in many cases), the dull expressionless face, absence of pupillary alterations or of paroxysmal exacerbations and the constant tremor. No mental changes occur other than those accompanying old age.

Cases of melancholia, though similar to paresis in some respects, can after a little study and observation be diagnosticated. I have just sent to an institution a man who presented for six months a picture of stuporous melancholia with a tendency toward dementia. For only a month have I been at all suspicious of paresis. The

sed state has continued throughout the entire period, but ysical symptoms are developing and he has exhibited homi- endencies; tendencies requiring moral restraint and separa- om his family. In this case the cerebral reflexes were very No grandiose ideas; in fact, the depression and dulness o marked that the physical signs were almost entirely masked. cently the tremor, uncertain speech, skipping of syllables tters, twitching of facial muscles and tremor of the tongue recognised, though only at intervals. There are no causes han la grippe obtainable in this patient. The depression is e in this class of cases, like an extreme type of melancholia, e physical symptoms confirm the diagnosis.

other form of paresis was presented in the following case:

B., 48 years of age, railroad engineer; but of late a barkeeper. e a specific history, but was always robust. Symptoms—severe he, nausea, tremor of the tongue, also of facial muscles, tremor hands, flushing and pallor of the face and contracted pupils. ng the prodromal or stage of alteration, he grew reckless, gant, suspicious and dishonest, finally homicidal. He had ose ideas and plans, relating to himself, his financial standing and l development, requiring asylum care, where he has been for over rs. Convulsions threaten his life frequently. He has grown out and appears strong except when attempting any active move- hen tremor is very marked and exhaustion follows. He shows ed mental enfeeblement and will doubtless live only a few

S., aged 32; patient overworked and studied nights through his fe and always had heavy responsibilities and worries. He con- syphilis some years ago, but was apparently well until the onset proved to be general paresis two years ago. When he first nder my care he complained of general weakness, forgetful- eadache and general inability to do his work. Knowing ng of his early history I prescribed the iodide and mer- treatment with tonics. I also advised a vacation, which he one month, when he returned to the city greatly improved. In eeks the same story was repeated, with added distress that he o give satisfaction to his employer. At this time his pupils were r, one much smaller than the other and he began to be irritable remely feeble. Soon a convulsion occurred which completely ced his reason; he became unmanageable and was removed to m. Typical symptoms developed, but none of the grandiose He passed from bad to worse and died recently in convulsions, o years from the earliest noticed manifestations.

Time forbids the presentation of the histories of other cases under observation. Two of these given cases present syphilitic histories; in two there were no histories of specific disease, intemperance or traumatism; and as stated I find the minds of men divided regarding the etiology of this disease. All are convinced, however, of the advisability of an early diagnosis and close observations when the earliest symptoms become manifest, that by rest, electricity, tonic and specific treatment the progress may in some cases be delayed; also that bodily injury may be avoided and financial losses averted by checking extravagant investments and foolish schemes before it is recognised that our patient is mad.

505 WARREN STREET.

A BROKEN NECK—RECOVERY.

BY GREGORY DOYLE, M. D., Syracuse, N. Y.

ON THE 18th day of October, 1894, about 6 o'clock in the evening, James Neville, of Syracuse, was thrown headlong from his wagon during a terrific runaway. He was soon after found on the roadside, apparently dead.

Physicians who were quickly summoned from the immediate neighborhood, however, detected faint signs of life, and also a deformity of the neck, which led them to suspect dislocation. An ambulance was called, and without any effort being made to relieve the deformity, he was placed in it and driven to his home, about a mile distant, the jolting over rough roads greatly aggravating his condition.

Upon his arrival home I was called, and reached his bedside about an hour after the accident. I found him unconscious and making but seven or eight respirations per minute, with a slow and intermittent pulse. His body and limbs were paralysed and his head was thrown back to an abnormal position, as correctly shown in Fig. 1. The neck was rigid and presented an unusual anterior convexity, with a deep furrow or concavity above the vertebra prominens. His general appearance certainly presented a hopeless condition.

I became satisfied, after a rapid but careful examination, that there existed a dislocation of the neck. Without further preliminaries I prepared to reduce it. Two men were told to grasp the feet and two more the head, and were directed to make careful but

extension. At the same time I placed my right hand
t the neck, just over the pomum Adami, and my left against
ciput, and while extension was being made I flexed the head
d until the chin nearly touched the breast, after which the
as returned to its normal position. This manipulation was
panied by a clicking sensation, caused by the replacement of
dislocated vertebra. Those assisting me also felt it.

e patient immediately showed signs of relief and improved
y. Perceptible but feeble movements were made by all the
except the right arm. He remained in a comatose condition,
er, for eight or nine days, during which he had enuresis

FIG. 1.

—MR. NEVILLE'S POSITION WHEN I ARRIVED AT HIS HOME SOON AFTER THE ACCIDENT.

ntestinal torpor. He suffered also from severe concussion
brain, which accounts for his prolonged coma. Delirium
resent for several days, during which he tossed and struggled
is attendants. On this account I did not deem it prudent to
any retaining apparatus, such as bags of sand or bandages
kind, but instructed the nurses to gently turn his head with
dy during his frequent movements from side to side. His
ul wife, with her assistants, kept constant watch over him
o injury might occur.

s recovery was tedious, during which frequent relapses
ed. His first complaint after consciousness returned, which
n the tenth day, was of a sense of constriction about the
as if he were being choked. This gradually passed off, and
provement went on without development of any serious
oms until the present writing. He now appears to be in the
f health and able to attend to his daily avocations.

I was fully aware of the danger of lacerating the spinal cord, or perhaps an important blood-vessel, in my attempts at reduction, but, at the same time, was certain the man had but a few moments to live if not promptly relieved. Had he died during my efforts to save him I would, no doubt, have gained the credit of launching him into eternity, but as "desperate cases require desperate remedies," and in this particular case it was "do or die," I felt it my duty to afford him the only chance of life he had.

I believe many cases of broken or dislocated neck might be saved were it not for the unwarranted and culpable timidity of some surgeons. Of course, where the spinal cord is lacerated or greatly compressed in such accidents, death ensues rapidly and

FIG. 2.

DOYLE—SHOWING DISLOCATED BONES OF THE NECK, PRODUCING A BROKEN SPINAL COLUMN.

sometimes instantly. In this case, however, the compression of the spinal cord was not sufficient to cause rupture of its membranes or vessels, and the displacement of the vertebra was such as could be safely reduced by careful manipulation.

In this case the dislocation occurred at the fifth cervical vertebra. Many persons are not aware that a dislocated neck is in reality a broken neck, for the displacement of the vertebra causes a break in the spinal column, as plainly shown in Fig. 2. Therefore, a broken neck and a dislocated neck may properly be called synonymous terms.

After relieving my patient from his perilous condition, I had him removed from his couch to a bed in the next room. Several

cians who had also been summoned came in. In their esti-
n the case would surely prove fatal, and one especially, the
r of the convocation, declared that hemorrhage of the brain
aking place and that there was no possible chance for recov-
With this sage announcement he "stepped down and out"
trode off into outer darkness with an air of self-satisfied
ibility. His conclusions, however, were drawn from an incor-
liagnosis, as the sequel proved. I maintained at the time
the paralysis was due to the injury of the spinal cord and
cerebral hemorrhage, and could not agree with his diagnosis

Fig. 3.

OYLE—MR. JAMES NEVILLE AS HE APPEARS AT PRESENT.

gnosis. I also felt justified in my efforts to relieve every
orable symptom that might develop, and continued unremit-
in my course until, at the end of three weeks, I had the
re of seeing my patient able to get on his feet and even to
up his bed and walk" if necessary.

ave purposely delayed writing up this remarkable case until
esent, in order that I might be able to record a complete
ry, and thereby sustain my diagnosis and justify the opera-
Many "brilliant" operations are performed throughout the
n which every step of the proceedings is faithfully detailed
fulsome description thereof, but curiously enough, whether
gh oversight or otherwise, the results are not mentioned.

Whether the patient survived or not, is the first question asked or thought of after reading of remarkable operations.

It is often trumpeted forth that Dr. Blank performed a wonderful operation which was skilfully done and was a complete success, and winds up with the meek admission that the patient died. I do not consider an operation "skilfully" done when the results are fatal, nor do I consider an operation justifiable when its performance is not imperative or the chances of relief or complete success are not of the best.

While recovery from dislocation of the neck is of rare occurrence, there are some instances recorded in surgical works, but as a history of them might prove tedious I will conclude by quoting from Ashhurst's International Surgery the opinions of some of the most eminent men in the profession on this important subject:

At the first examination the surgeon should make the diagnosis as complete and accurate as possible, particularly in regard to distortion or deformity of the injured parts and the displacement of the injured bones, so that future examinations on these points may be avoided. Should the lesion prove to be a dislocation, whether it be pure or attended by fracture, the question will immediately arise whether it ought to be reduced or not; that is, whether the principal indication in the treatment of dislocations in general ought to be fulfilled in treating vertebral dislocations or not. On this point, which is nearly the main point in the treatment of such cases, the opinions of surgeons have been, unhappily, divided. Mr. Erichsen says: "Reduction has been effected (with success) in a sufficient number of cases of this kind to justify the proceeding being adopted when the danger is imminent." Dupuytren, on the other hand, affirmed that such attempts were very dangerous, and that he had often known patients to perish while the extension was being made (Hamilton); from which the legitimate inference would follow that reduction was, in some cases, a proceeding too hazardous to be admissible. I have, however, serious doubts as to Dupuytren's assertion being well founded, for I do not find any cases whatever reported in detail, which Dupuytren could personally have known, wherein the patient perished while extension was being made. No instance of the sort is mentioned among the 394 cases that are embraced in Professor Ashhurst's tables, which clearly shows that, "in the treatment of dislocations in the cervical region, the mortality has been nearly four times greater when constitutional or general treatment has been relied on exclusively, than when attempts have been made to reduce the dislocation by extension, rotation, and the like." An inspection of the same tables also shows that in the treatment of dislocations, in the whole spinal column, "the proportion of deaths has been almost three

s large when general treatment has been exclusively used as xtension has been employed. The results of those cases which urvived have also been, as a rule, more satisfactory after exten- an without it. I have already mentioned several instances in reduction was successfully employed in the treatment of cervical tions, in some of which recovery would otherwise have been hopeless.

eems to me that the inference is fairly warranted, from the fore- onsiderations, that extension (combined, of course, with rota- pressure, as required,) should be employed in every case of lislocation where the spinal functions are disturbed. When the is is not clear, it will be better to adopt this mode of treatment reject it, and I should be disposed to try it in every case where hortening or marked angular displacement was found. (Ash- It seems to me, also, that in recent years the current of surgi- ion has, with justice, strongly set in favor of treating spinal ions, those with as well as those without fracture, by reducing Professor Porta, after carefully analysing twenty-seven cases in omes to the conclusion that the first indication in the treatment bral dislocations, as in that of other dislocations, is to reduce Mr. Bryant (1878) says: "have seen several cases in which relief was afforded by this course, and the records of surgery many more. Practised with discretion, extension of the spine less a valuable means of treatment." Whenever it is applicable, t plan of effecting reduction consists in making extension and extension by the gradual traction of assistants, whilst the sur- deavors to effect manual replacement.

West Genesee Street.

RT OF A CASE OF APPENDICITIS WITHOUT PRECEDING PAIN OR FEVER.[1]

By S. L. ELSNER, M. D., Rochester, N. Y.

. A. H., *æt.* 32, German, clothing cutter. On July 6th, in the forenoon, I found him complaining of nausea with a distress in gastric region. He said that during the night he awakened and t his night lunch had been too much for him. He vomited twice the early morning hours and was positive that if he could be o vomit again he would feel relieved. Examination of his n was negative, his temperature was normal and pulse 74. I ed pepsin and soda and did not expect to see him again. The ternoon, however, he sent for me. I found him in just the same n excepting that he appeared more impatient and nervous. I

[1] Read at the twenty-eighth annual meeting of the Central New York Medical Asso- eld at Syracuse, October 15, 1895.

gave him one-eighth grain of morphia, hypodermically, after which he rested two hours. At night he again summoned me and I found him with no pain, but still with the single symptom of distress in the stomach. His bowels had moved, temperature 98°, pulse 78. Upon making firm pressure over the cecum he had slight tenderness. There was, however, no soreness or pain after the examination. July 7th, at 9 A. M., I found my patient having a severe chill, his temperature now was 100⅘° and pulse 96. He presented an anxious expression, but denied having the slightest pain ; he stated that the distressed feeling which he so bitterly complained of on the evening preceding had entirely left him and he had a good night's rest. Examination at this time elicited much more tenderness on pressure over McBurney's point, and in view of his chill and tenderness I diagnosticated appendicitis and advised immediate exploration. He consented and I returned for him in about one hour. He walked out, placed himself in my wagon and I drove him to the hospital. At no time during the ride, and I frequently asked him, did he complain of pain. He was prepared in the usual manner and I operated that same evening. The appendix was found much enlarged, gangrenous and ready to rupture at its base. There were very few adhesions and the operation was rapidly completed. The patient made a good recovery without having had a particle of pain and never but the single rise of temperature of 100⅘ during the chill.

I report this case because I consider it rather unique and of great practical value in diagnosticating some of these rapid and often fatal cases of appendicitis. The fact of there being no adhesions might possibly account for the absence of pain. It also demonstrated how rapidly fatal such cases would be were they not early recognised and quickly operated upon.

Given a patient with local tenderness over the cecum and an anxious expression, regardless of temperature, pulse and local pain, appendicitis should be suspected. A chill, with the above, followed by a rise of temperature and pulse, call for immediate exploration. I place more reliance upon a chill as indicating beginning perforation than any one single symptom and have learned to waste no time in getting into the abdomen in such cases.

The specimen which I will pass about for your inspection is about one-half its original size, but illustrates very lucidly how much destruction can take place in a few hours.

DISCUSSION OF DR. ELSNER'S PAPER.

Dr. W. S. CHEESMAN, Auburn : For the sake of introducing the discussion, I would like to say that, in some respects, the case seems to me quite unique. In this case the patient complained not at all of pain

y stage of the illness. I do not think it is rare to see cases of ndicitis that have gone on to perforation in which there is no pain. is one of the commonest things, I think, and one of the most tive. You cannot depend at all upon pain, the most reliable sign the condition of pulse and general appearance of the patient. is a case of appendicitis going on to gangrene, and yet the patient o pain whatever, except a slight one in the epigastrium. I think erts the importance of early operation. I myself find I am coming and more to the view that if you can make the diagnosis of appen- you are justified in operating. Suppose you make an error: t case you have not performed a dangerous operation. You have an opening of the abdomen, to be sure, but if it is not appendi- ou close the opening after having made an aseptic incision. If it pendicitis you save the life of the patient. No surgeon or physi- I think, can tell us we are face to face with this trouble. We are solutely sure and do not know whether that case will go on to ration; we do not know whether it will limit itself to catarrhal mation or subsequently advance. But we must decide promptly and perform the operation or say in so many words, "I don't know" ait and see what happens.

r. N. S. JACOBSON, Syracuse: I feel, with Dr. Cheesman, this is a ct of too much importance to pass by without remark. During the our or five years those of us who have been called to meet these surgically have had perhaps a varied experience. I can say I have ently encountered cases where there has been absence of charac- ic symptoms upon which we can depend. I have found the pulse emperature in some cases normal. I have met several times a without pain but with localised tenderness, usually at the charac- ic point, but to find a case of perforated appendicitis without pain nderness is a condition which I have not encountered. I have s been able to make out a characteristic point of fixed localised rness.

a case seen during the month of July with Dr. Sears, the pains d in the back, and the diagnosis was that of lumbago. At my isit, on the eighth day of the sickness, there was an area of tender- o extensive that it was no longer difficult to recognise the fact most serious condition of things existed. Upon operation we a large post-cecal abscess. There existed also, in this case, the al complication of a secondary entirely separate appendicular ss, in which the gangrenous appendix lay separated from the ine.

have found that it is not wise to depend upon the temperature or ulse. Usually we find rigidity of the muscles, however, and evi- s of trouble can be made out by a careful study of local symptoms

The author of the paper lays great stress upon the occurrence of the chill as indicative of perforation. Upon this point I should disagree with him, recognising rather the chill as significant of a septic condition than as warning us of the occurrence of a perforation. Inasmuch as most of the cases of appendicitis are now considered as due to infection by the bacillus coli communis, we are forced to realise that we are dealing with a septic condition. I have felt that I could depend in my diagnosis of the occurrence of perforation rather upon the manifestations of shock.

As to the question of operation, we are all agreed that the earlier it can be performed the better are the results obtained. While I am by no means ready to maintain that every case of appendicitis demands surgical intervention, I am satisfied that these cases which show progression after the first twenty-four hours are more safely treated by surgical than medical means. In, however, that class of cases in which the septic manifestations are so rapidly progressive that general peritonitis is almost a coincidence with the appendicitis, no surgical operation apparently is of avail.

A case seen with Dr. Elsner, of Syracuse, presented the history of a man who had gone to his work, as usual, at seven o'clock in the morning and at ten o'clock called at the office of the doctor, at which time it was already possible to diagnosticate general septic peritonitis. Although there has recently been made in our medical journals a claim for the cure of septic peritonitis by means of irrigation of the abdominal cavity with sterilised salt solution, I must confess that in my hands this line of treatment has not as yet been satisfactory.

As to the case presented by the writer of the paper, I feel that he is to be congratulated upon his recognition of the existing condition, for as a result of his diagnostic acumen the case terminated happily, while, had the operation been delayed for another twenty-four hours, I believe there would have been found associated with appendicitis general septic peritonitis, with a probable fatal ending.

Dr. C. O. BAKER, Auburn: I want to congratulate the author upon his diagnosis. It is a question in my mind if there can be a case of appendicitis entirely without pain. My experience with these cases leads me to believe that there is always accompanying pain in some portion of the abdomen. The inflammation may be very moderate, it may be severe; circumstances control it. That condition may be passing over forty-eight hours, possibly longer than that, without pain or any indication that there is any difficulty about the patient except the nausea that is caused by the probable absorption going on.

To open up the whole subject of appendicitis requires time. The symptoms of it are indefinite; so, too, are the landmarks for operation, as well as the time, the exact time an operation shall be done. I hold that

eration should be done for appendicitis until we are satisfied
ve have an appendicitis. I hold, further, that there is no such
as a harmless opening of the walls of the abdomen. I do not
how skilful the operator, he cannot repair those parts as per-
as they were before. Now, the patient has a right, in appendi-
of traveling round without the possibility of a hernia, without the
le following of any weakening of the walls of the abdomen; that
is a grave right which any physician should consider and should
ler with weight.

r. A. B. MILLER, Syracuse: One thought that impresses me in
ing to the discussion, one that specially regards the diagnosis,
no to which I would take exception, is that in any question of
exploratory incision should be resorted to, under our present
ptic methods, and no serious consequences would attend the pro-
e, while possibly a valuable life would thereby be saved. There
belief in the profession at present that pain does attend such
and that pain may be relieved under anesthetics. In our practice,
ver, it need not be necessary to resort to the exploratory method.
the patient is thoroughly anesthetised, the abdominal walls
and palpation alone should clear up any question of doubt as to
ing normal or otherwise. In my office practice I palpate the
dix in all my cases, differentiating the normal from the abnor-
thus, by palpation, the existence of appendicitis can be appre-
d before opening the abdomen.

r. S. L. ELSNER, of Rochester: The gentlemen who have so
discussed my paper have simply reiterated what I stated in
would state, for the benefit of some who perhaps misunder-
me, that I did not say that this man had no tenderness. He did
enderness, but at my second visit it was so slight I did not feel
was going to encounter any trouble. Upon the second visit this
ness was more marked, and aside from that tenderness there
solutely no physical sign. Of course, with that tenderness, fol-
rigidity of the muscles over the right side of the abdomen, which
ld not get from any other condition. There was no other sign
t to lead me to suspect appendicitis. The fact he had a chill,
ct the temperature went up, his pulse went up, the expression of
an's face—my past experience has taught me to look at such
ts as seriously ill—with such symptoms I have found it always has
wise thing to explore. The distress that he spoke of was in his
trium; it was not pain. The man expressed himself in German.
being asked in German if it was a bad pain, he said, "No, it is
pain, simply an uneasiness in my chest; if I had something to
my stomach I would feel all right."

hen I said perforation, I meant an inflammation had taken place.

When perforation takes place it is caused by the processes of softening, due to the inflammation and the ulceration, which leads to the perforation. In connection with the diagnosis made in this case, I would like to bring to your notice another case in which I made just as positive a diagnosis as I did here, and the man had every symptom of appendicitis. He had a chill. I opened that man's abdomen; I found the appendix septic for three inches, caused by gangrene. I am positive the man never would have recovered if I hadn't opened him. I know sometimes these patients after operation are often not as well as they were before, as far as strength of the abdominal wall is concerned, but they are certainly given a chance they wouldn't have had if operation had not been resorted to. In concluding I would say that cold water injections are not efficient in my hands.

[The discussion on the papers of Drs. Hall and Snow was not received in time for the December issue, hence is printed here.]

DISCUSSION OF DR. HALL'S PAPER.

Dr. N. S. JACOBSON, Syracuse: Unfortunately I was not present at the beginning of the paper; hence, in discussing this very interesting subject, cannot speak as to the statements of the writer. However, I am convinced that these cases are extremely rare, and many of the books state it is impossible to make an absolute diagnosis of this condition during life. Most of the cases have been discovered after death and, generally speaking, fracture of the greater tuberosity is usually associated with dislocation of the head of the humerus.

As to the treatment, it has been very unsatisfactory until recently, when, I believe, foreign surgeons have suggested that this is particularly a place for the open treatment. Prior to the antiseptic era it was, of course, considered a very serious procedure to treat a compound fracture openly, as fully fifty per cent. of the cases died; but we have reached a point in antiseptic procedure when we may, as a matter of choice, open down upon the fractured surface, and in this case particularly the line of treatment that is to be pursued in the future is the open treatment. I think it promises as well here as any line of treatment, and I feel satisfied that the writer has obtained as good a result in his case as possible, except perhaps by the open treatment.

Dr. A. L. HALL, Fair Haven: I wish to reply to one statement made by Dr. Jacobson—namely, that nearly all were diagnosticated after death. No doubt that is true in many instances, but they have been diagnosticated beyond a question when alive and three or four other observers beside myself have recorded cases of undoubted fracture of the greater tuberosity of the humerus. The open line of treatment in old persons I think would not be wise, unless there was displacement.

Dr. T. H. HALSTED, Syracuse: One thing which occurs quite fre-
ntly in early tubercular involvement of the larynx is anemia of the
palate. A marked anemia of the uvula and soft palate is a symp-
which though, of course, it occurs in other diseases, should at
e suggest beginning tubercular disease of the lower respiratory
t, and this symptom is none the less valuable because it is an early

Morell Mackenzie makes the statement, in his book published in
4, that up to that time he had seen but four cases of tubercular
ngitis cured. The literature of today is full of cases of healed and
d tubercular ulcerations and infiltrations of the larynx. This
roved prognosis is due to the improved local treatment of the dis-
—the treatment of Krause and Heryng—the local application of
ic acid in varying strengths and, in selected cases, the curettement
ne larynx, followed by the rubbing in of lactic acid. Lactic acid is
best local application we have, whether we hope to effect cicatrisa-
of the ulcer or merely give our patients temporary relief from their
phagia.

Then, with reference to the Adirondacks, we should exercise great
e and good judgment in selecting cases to be sent away from home.
e we send away hoping the disease may be arrested and the patient
d; others, again, for whom the best to be hoped for is a prolonga-
of life. Advanced cases, and especially patients who are unusually
rous, are only likely to advance more rapidly because of the depri-
ons of home comforts, lack of food suitable for a sick person with a
icious appetite, and the noise and confusion incident to a hotel or
rding-house. Ordinarily, we can look for improvement in patients
ne first and second stages, and these persons, with of course excep-
s, can be sent there. We should not be satisfied to simply say,
o to the North Woods." We ought to be able to tell them just
re to go and, if possible, to know of some good boarding-houses.
y, especially men, do much better to keep clear of the regular
rding houses and hotels, and live literally in the woods. Many
ents whom I have sent to the Adirondacks have improved most
derfully, the disease being arrested in some only to recur later, and
thers there has been no recurrence. I have seen extensive tuber-
r ulcerations in the larynx heal and cicatrise under the application
ctic acid and a residence of some months in the Adirondacks. I
e great faith in the North Woods, but discriminate in sending
ents, and, believing in the local treatment of tubercular laryngitis,
e it a point to send patients requiring local treatment to some part
he woods where such treatment can be had. The Saranac region,
region of Lake Placid and North Elba meet these requirements, and
deavor to send my patients there, though believing no one section

has any very material advantage over any other, except for the reasons named. I also believe that patients do better there in the winter than in the summer months.

Dr J. P. CREVELING, Auburn: In some of these cases where the ulcerative process has closed and the mucous membrane reformed, if you examine carefully you will find the tissues underneath and around remain infiltrated and thick, so that in reality the disease is not entirely removed. The mucous membrane remains in a tuberculous condition, so to speak, and the disease is liable to start anew. There is no doubt but that this condition may remain dormant for years and, possibly, the disease be regarded as removed, when in reality it is only held in check. A number of such cases have come under my observation during the past five or ten years. I now recall a case I treated some fifteen or sixteen years ago that I supposed had recovered, but she presented herself to me again last summer after having traveled all over the United States and having been treated here and there at intervals, as occasion required, only for me to discover the throat lesions reappearing and a dulness at the apex left of the lung. The disease had been held at bay all this time. It is sometimes a question just how much permanent benefit is received by sending some of these cases away for only a time, for on their return home the disease again brightens up and its progress is equally as rapid as before.

One word regarding the anemic condition referred to about the palate and throat, as in my opinion that depends very much upon the general condition of the individual, especially in the case of girls or young women. I have had those cases come to me in years past, where the throat presented this pale, anemic appearance, with a slightly troublesome cough without any tangible evidence of tubercle anywhere and I have seen those same girls grow up, in fact, they appear on our streets today, developed into strong, vigorous women. I do not regard the anemic condition as characteristic—merely suggestive.

Dr. H. L. ELSNER, Syracuse: The discussion, as it stands, leaves the subject under consideration in a hazy and rather unsettled condition, which fact prompts me to say a few words. I must take exception to the statements made by Dr. Creveling, for I do not believe that the disease returns with renewed energy after the patients with tuberculosis return from the Adirondacks. The disease may not be arrested in some of these cases, the disorganising processes may not have been influenced materially, or the cases may not have been fit ones for treatment in the woods. There are cases of tuberculosis which cannot be benefited by a climatic change. Many such have been sent to the Adirondack region. These must necessarily return to have the disease make the usual progression towards the fatal ending. We cannot expect permanent relief in the majority of cases, but it is certain that the experience of many

ful clinical observers justifies the conclusion that there are cases of onary tuberculosis, as well as tuberculous laryngitis, which do well e Adirondacks and which continue to do well after their return. est, climatic treatment must be largely experimental, for there are ules which we can follow in directing our patients. It is within the rience of all physicians to find cases with similar symptoms and ame pathologic changes differently affected by the same climate. deductions must be reached after a thorough consideration of results in a large number of cases. The class of cases which is benefited by a stay in the Adirondacks is not of the acute type e disease. Such cases we recognise by the high temperature, pulse and progressive emaciation. The physical signs are not ys well marked, for the tuberculous process is disseminated and ganisation takes place only after the disease has existed for a few s or months. On the other hand, with infiltrating tuberculosis, e the disease is not far-reaching, the temperature not above 102° ght and the pulse below 100, you will find the benefits of the ondacks positive in the majority of cases. It is necessary for these nts to be kept under observation, and I know of no place where an be better done than in the North Woods. I recall at this time nber of cases, which have been practically cured by a prolonged and the treatment instituted at the sanitarium at Saranac. I do ean to say that the tuberculous has been changed to normal lung , but I am positive that the disease has become latent. The nts are now enjoying comparative health and have become useful bers of society. Tuberculosis can become latent, and it is not an quent experience to find a considerable area of latent tuberculosis ults who are to all appearances perfectly healthy.

have seen so many good results follow timely visits to the Adiron- in well-selected cases and at the proper season, that I have been d to look upon this region as one of the greatest boons which the e of this state enjoy. Unfortunately these woods, with their hun- of lakes and lofty health-giving pines, have not been appreciated e people, otherwise we would not be pained to see the destruction rge tracts for the purposes of gain and the various other evidences ndalism, by which we will soon be robbed of a tract which ought preserved and at once converted into a national or state park. he duty of the profession to impress these facts upon the laity, as s upon our legislators, that steps may be taken to insure protec-

r. J. P. CREVELING, Auburn: If the doctor will remember, I did not e ulcers reopened, yet I believe they may, or rather that new ones ake their place. I said the mucous membrane might remain infil- and new ulcers appear at any time. Now, we have all seen some

of these cases get well at home. I have made and Dr. Elsner undoubtedly more often, dissections where there has been found evidence of former lung lesions such as old cicatricial tissue, the result, probably, of healing of an abscess or some other structural change. Such cases live among us today. I am not speaking against the Adirondacks or of a particular class of cases—in Dr. Snow's paper he made distinction—it was a general assertion of tuberculosis regardless of class I am still convinced of the truth of my former statement and that this is true of any place, the Adirondacks being no exception.

Dr. W. J. HERRIMAN, Rochester: I would like to say that in conversation with Dr. Trudeau, last spring, at Saranac Lake, he said to me that a majority of cases of incipient tuberculosis should not be sent to the Adirondack region during the early spring or summer, and Dr. Elsner brought that remark to my mind when he said that in well-selected cases he was a firm believer in the efficacy of climatic treatment. I would add that the patient should be sent there at some definite time of the year. Dr. Trudeau, whom we look to as authority, gave me the impression that cases could be sent there in the fall or early winter in preference to any other time of the year; that cases sent there during the spring and summer did not, as a rule, do well until the advent of cold weather, but cases sent there during the fall and winter did well then and continued to improve during the subsequent summer. The particular case in question that was talked of, a lady, was at that time in Asheville, N. C., and Dr. Trudeau advised her to remain there until the fall, until the close of warm weather, and then have her take up her residence in the Adirondack region, depending more upon the rarity and dryness of the atmosphere than upon the altitude alone.

Dr. F. S. CREGO, Buffalo: If Dr. Cheesman will take the chair a moment, I would like to say a word concerning the treatment of tubercular troubles. As regards location, I have no very important suggestions to offer on the subject, but I have had a very unpleasant experience in sending friends, or advising them to go to the Adirondacks. I do not know whether any other gentlemen have had the same experience. I had two cases last year that I sent there. One died, a very bright physician; and another physician, who did not improve very much, went to Denver. It seems to me that the only treatment of these cases is to get them into a high altitude and keep them there. In a very limited experience, that has been my observation. There are a few cases that recover in the Adirondacks, but a great many more recover in higher altitudes, in the West and in Asheville, N. C. I would like to hear from some gentlemen here as to their experience as regards climate. It seems as though a great many of these cases were wasting time in going to the Adirondacks; it is not a

nough altitude, not dry enough, it seems to me, in a vast num-
instances. Of course Dr. Snow has had experience. My lim-
perience has been just the opposite from Dr. Snow's.

. S. F. SNOW: There is nothing in particular that I would add,
that I want to make myself plain, and the paper I think would
one so if I had been able to finish it. I do not advise sending
ed cases to the Adirondacks. I think the cases in the first and
beginning of the second stage of tuberculosis should be sent
In regard to high altitude, I do not attach the importance to
Dr. Crego does. I think that more depends upon the soil; we
e sure of good drainage, a dry pure air; altitude in many cases
t seemed to avail very much. I think patients should be up
,000 to 1,200 feet.
other point that I think we ought to emphasise is that the patients
take their systematic bathing, cold baths I mean, and exercise
doors, exercise every day they can get it.

OLLECTIONS AND OBSERVATIONS OF A COUNTRY PRACTICE, WITH CASES.[1]

BY GEORGE M. PALMER, M. D., Warsaw, N. Y.

PPOSE, because of rural associations and lack of polish
cident to newer and more enlightened opportunities, under
the later generations have been trained, it is natural to look
old-time workers as professional back numbers.
ave regretted somewhat my promise to occupy your time,
e of the painful conditions surrounding me, necessarily
ng in upon the train of thought, tending, naturally, to make
connected and incomplete but retrospective, simply recalling
rly experiences and observations, making no claims beyond
a moderate degree of professional wisdom, as taught half a
y ago, and a fair degree of practical common sense, would
.

e practical points that I hope to make are: first, the import-
f being the possessor of practical common sense and a good
of versatile mental resources in emergencies, and the ability
k; second, the importance of cleanliness in person and in
third, to call attention to the wonderful advances that are
made in the science of medicine and surgery, emphasising

[1] Abstract of a paper read before the Wyoming County Medical Association, at October 29, 1895.

the thought that the later graduates in medicine are not to be excused if they are not better equipped for their work than were their long-ago predecessors.

The emergencies that beset the lives of medical men have proved that they must be thinkers, not only with mental apparatus intended to fulfil that function, but with all of the accessories that bind together and obey the mandates of the brain. All of the organs of special sense must be trained, practical and alert, and each heart-beat feel the impulse born of a great love for, and pride in, the work he has to do and a care for its results, that they reflect a light that shall illuminate his life with gratitude for what he has accomplished, and a hope for and faith in a successful ending of the work that lies before him.

Some of us here present can remember the teaching that the point of the finest cambric needle piercing the peritoneum was sure to induce serious or fatal inflammation, and that opening into a diseased joint, allowing the admission of air, was sure to bring serious, if not fatal, results.

Something must happen to set the profession thinking upon the subject, and Providence gave them the case of the insane woman, who plunged a large pair of tailors' shears into her abdomen, allowing several knuckles of intestine to protrude from the wounds. Thorough irrigation with hot salt water, returning the protruding intestines, closing the wounds and opium narcosis, permitted the woman to recover with reason restored. Another, the case in point is that of one of my own patients, who with a razor mutilated himself and made a large opening into his abdomen, through which his intestines protruded. The wounds and protrusions were thoroughly cleansed with hot salt water, some bleeding vessels ligated, the abdominal contents replaced, sutures introduced, and the hot brine treatment, with compresses and bandages and narcotics, served to effect a cure. Such incidents caused the profession to wonder and to speculate.

I remember once seeing some professional gentlemen gather up their belongings and, with the motion of washing their hands of such a proceeding, leave me alone with the patient, because I insisted that a large free incision should be made into a knee-joint that all admitted was surrounded by and filled with pus. They remembered about valvular openings into joints. Nevertheless, a four-inch opening was made, air admitted and pus discharged, and the best then known aseptic treatment, thorough continuous irriga-

ith boiled water, was resorted to. This patient will, today, r run a foot race with any man of his age.

w few the years since laparatomy, at the hands of two or listinguished surgeons under the name of ovariotomy, was ed as an almost superhuman exploit, and a history of 30 to cent. of recoveries in selected cases was considered some- marvelous; while now at the hands of expert operators of patients, from the highest grade of humanity down to vest denizens of the slums, are walking out of our hospitals nose operations, and the fatal cases are hardly worth record- insignificant is the number, and country practitioners in every town and hamlet, where within my memory it was t necessary that a patient must seek a hospital to have a amputated, are turning out successful laparatomies. As I shall cite a few cases under the old methods, which will ay purpose and suffice for comparisons:

E I.—A. G., aged 50 years, was dragged by a runaway team, with great violence against a stationary obstacle. The blow eived on the lower border of the left orbit and malar bone. The f the bony structures were driven downward until the superior and palate bones were almost on edge, the lower maxilla frac- nd forced into the position seen in its complete dislocation. The ts were bruised and lacerated and the patient unconscious. The ng physician had decided that there was not much to do. I was n consultation a few hours later. Then the hemorrhage had d and the blood stains partially removed, giving the patient a rmidable appearance. Fortunately, the accident occurred in and snow, instead of gravel and dirt, was ground into the parts. All ordinary manual efforts failed to move the bones, a leverage was devised, and finally, after and during thorough on with water, the broken parts were loosened and placed in . The nasal bones were crushed and the malar prominence had ared. The fenestrated ends of large, flexible catheters were well up into the nasal passages, loosened teeth removed, soft- raffine fitted between and around the remaining molars, reten- ndages applied and continuous irrigation directed with a solution ssium chlorate. The subsequent dressings were almost wholly This patient made an excellent recovery. There was very s and that was mainly in the nasal passages, probably due, in easure, to the presence of the catheters.

E II.—D. J., aged about 25 years, was kicked squarely in his a powerful young horse. I was called by Dr. S. C. Smith, of Cas- see the case with him. Examination revealed that the bones of

the face and upper maxilla were crushed and comminuted, no parts below the orbits presenting any appearance of the human face. Considerable time was spent in irrigation. The face and oral cavity could be molded and shaped readily by gentle manipulation, only to drop back again to the original shapeless condition. A little knowledge of dentistry came to our aid, and an impression was made with softened wax and molded into form, and from this a vulcanised rubber obturator plate was made and fitted as a splint. The injured parts were kept in place, and this patient got up with very slight deformity or impairment of function. In this case, too, water dressings were relied upon.

CASE III.—A. Mc., aged 19, was attacked with violent pains in right hypogastrium whilst following the plow. He was carried to the house, placed in bed and the ordinary domestic remedies resorted to. No medical aid, however, was sought until some weeks had passed, when his father came to my office with the statement that he thought his son was fatally ill. I found the patient emaciated, haggard and almost idiotic; his right thigh was strongly flexed upon the body, and a large fluctuating tumor in the right epigastrium, which evidently contained pus quite near the surface. I made a pretty free incision, which permitted the escape of a large quantity of pus having an intensely fecal odor. The patient fainted, but under the use of restoratives he soon revived, when the opening was enlarged. The abscess cavity was flushed with hot salt water, packed pretty firmly with finely-picked oakum, and constant irrigation with a solution of phenol and potassium chlorate at 100° F. for the next twenty-four hours, by means of a siphon. At my next visit the patient was in a condition that deterred me from disturbing the packing and I left him with the siphon in operation, which was continued until the fourth day, when the packing was removed and the cavity, somewhat shrunken, was washed with clear, hot water.

At this time I first thought of and saw what was left of the vermiform appendix, a little shriveled stump of which was all that remained. Fortunately, I did not know what to do with it and so did nothing but repack the cavity and continue treatment as before. The incidents calling for special treatment were unimportant. This patient had suffered some from diarrhea, but his bowels were kept quiet ten or twelve days after the operation and then moved without trouble or accident and recovery was satisfactory. I do not know why destruction processes had not occurred.

These cases demonstrate the fact that just a little knowledge is not always a very dangerous thing, and that water, cleanliness and drainage are important elements of success in surgical proceedings; but they more definitely illustrate the difficulties that beset us in

those days, by reason of the limited knowledge as to diagnosis and the scanty appliances at hand for operations and for subsequent treatment of our cases.

[NOTE.—This paper contained many observations of personal and local interest, but which, for lack of space, we are obliged to omit.—ED.]

ON THE RELATION OF PELIOSIS TO THE OTHER FORMS OF IDIOPATHIC PURPURA.

BY ALFRED E. DIEHL, A. B., M. D., Buffalo, N. Y.

EVER since the classification of diseases of the skin by Hebra, there has been more or less discussion as to the position which peliosis or purpura rheumatica should occupy. While nearly all writers agree that purpura simplex and purpura hemorrhagica are one and the same affection, differing only in the degree of severity, yet there is a difference of opinion as to what relation peliosis holds in connection with these two. Some writers hold that it is a separate disease; others, that it is one of the exudative erythemata and some hold that it is the same disease as purpura simplex with the addition of the joint symptoms.

The following case, I think, goes to prove the last theory, *i. e.*, that purpura simplex, peliosis and purpura hemorrhagica are one and the same affection, each presenting the same local manifestations and differing only in their individual severity.

The affection in this case began as a simplex purpura and continued as such for some length of time and apparently recovering, but a sudden change of atmospheric conditions again brought out the manifestations of the disease with increased severity, thus showing a distinct rheumatic tendency.

The case is as follows:

Miss M., aged 28 years, family history was negative, never had rheumatism, nor was there a rheumatic diathesis. On January, 1895, she first noticed a few pin's head sized spots on the inner surface of both thighs. These spots covered an area equal to about the size of a palm of the hand. At that time she had no fever, no symptoms of debility, no appreciable anemia, appetite was good, in fact, as she said, she felt perfectly well. Further examination showed no organic disease whatever. During the course of a few days these purpuric spots appeared with increasing frequency and on the evening of January 13th her legs became swollen and extremely painful, necessitating her being carried up stairs. Inspection at the time showed her legs and thighs to be literally

covered with purpuric spots, ranging in size from a pin's head to that of a ten cent piece. There were also a few petechiæ on the arms, but none whatever on the trunk. The only symptom the patient complained of was the pain and swelling of the legs. Under treatment and absolute rest in bed, these symptoms gradually disappeared and at the end of a week there was not a sign of any hemorrhage whatever; consequently she was allowed to sit up. This, however, at once brought on another severe eruption. She was then ordered in bed again under the same restrictions as at first and kept there until April 10th. During this time several purpuric eruptions occurred, but not any of a severe character. She was then allowed to sit up in bed and for some days no hemorrhages occurred. It was then thought possible that she could go into the country, without danger to herself, in search of rest and fresh air. From that time until May 13th she remained entirely free from all hemorrhages, but on that day there was a severe frost and while out driving a severe eruption again came out on the legs accompanied with great pain and swelling, necessitating her being lifted from the carriage. She soon recovered from this attack and from then until the present time she has had no further attacks, with the exception of a few occasional petechiæ.

362 PEARL STREET.

Clinical Report.

A PECULIAR CASE OF SYPHILITIC INFECTION.

BY F. G. MOEHLAU, M. D.,

Clinical instructor in genito-urinary diseases; instructor in physiology, University of Buffalo.

IN THE latter part of June, 1895, an Italian applied to the university dispensary for treatment. Occupation, candy-maker; selling his goods on the corner of Broadway and Lafayette square at the time; age, 25; single. Examination showed a sclerotic chancre of three or four weeks' standing, patches in the mouth and throat, papular eruption on his back and inguinal lymphatics enlarged. He was treated for about a week, after which he never returned.

In the beginning of September, following, I was called upon to treat canker sore mouths in two girls, eight and twelve years respectively, and found, besides other signs, a sore resembling a chancre, in the younger girl, on the upper lip; in the older, on the fauces. After about four weeks I was informed that both children had a red rash on their backs and abdomens, which proved to

be syphilitic and loss of hair followed. One cycle of inunction soon caused the disappearance of the general symptoms. At that time I accidentally thought of my patient, the candy-maker. The children were often in that neighborhood and I thought of a possible infection, which it truly proved to be, as the parents were both healthy and the children had bought candy of the Italian vender several times. About two or three weeks after having partaken of the sweets the sores developed. Since then, the children left the city with their parents and I have been unable to find out more about them. After speaking to the Italian once upon the subject of his disease I have not seen him since.

A similar case came under my observation, where a baker gave syphilis to his apprentice. The sore of the boy was on the anus. How the infection took place was not to be found out, as he claimed he only wore a pair of his partner's trousers.

Society Proceedings.

MEDICAL SOCIETY OF THE COUNTY OF ERIE.

Reported by FRANKLIN C. GRAM, M. D., Secretary.

IN MEMORY OF DR. MAHLON BAINBRIDGE FOLWELL.

A SPECIAL meeting of the Medical Society of the County of Erie was held at the rooms of the Buffalo Academy of Medicine, Wednesday evening, December 11, 1895.

In the absence of the president and vice-president, Dr. John Cronyn was called to the chair.

Dr. CRONYN announced the death of Dr. M. B. Folwell, and stated that this meeting had been called for the purpose of taking appropriate cognisance of the melancholy event, for while it is the duty of the profession to cure others, they must themselves in course of time fall victims to the inevitable.

Dr. J. W. PUTNAM moved the appointment of a committee to draft a suitable memorial.

The CHAIR appointed Drs. H. R. Hopkins, D. W. Harrington and F. W. Abbott.

The committee presented the following memorial and moved its adoption :

MEMORIAL OF DR. MAHLON BAINBRIDGE FOLWELL.

WHEREAS, It has pleased our Heavenly Father to take from us in the prime of life and at the height of a most honorable and useful career, our esteemed colleague, Mahlon Bainbridge Folwell, we, the members of the Medical Society of the County of Erie, recognising that during a period of nearly thirty years Dr. Folwell has been a most valued and efficient member of this society, one who in every act of his professional life was most zealous of its honor and eager for the advancement of the profession which this society represents, wish to bear witness to his character—as a student, most patient and modest; as a teacher, wise and conservative; as a practitioner, untiring and skilful.

We tender to his bereaved family our most heartfelt sympathy, and we commend the example of his life as worthy of emulation. While we bow to the decree of an all-wise Providence we mourn his loss as irreparable.

HENRY R. HOPKINS,
DEVILLO W. HARRINGTON,
FRANK W. ABBOTT.

Dr. PUTNAM, in seconding the motion, spoke of the good qualities which the deceased possessed.

Dr. HOPKINS said he had known Dr. Folwell for thirty years, and related the circumstances of their first meeting. When Dr. Hopkins entered the Buffalo Medical College as a student he seated himself on one of the upper seats of the amphitheater. A young man introduced himself as Mr. Folwell and asked permission to occupy the next seat. On that day an acquaintance sprang up which continued in the closest relationship until death separated them. He went to him for advice on all important matters, and he acknowledged that many mistakes would not have been made had he followed his advice. Dr. Folwell was possessed of a soundness and integrity of character which nothing could warp or pervert. If a question was right the cost cut very little figure with him. No man honored his profession more, no man labored harder to keep it bright.

Dr. HARRINGTON spoke of his student days, of his army life and of his graduation in medicine, in 1867, and paid this tribute to him: "A braver soldier, a more conscientious physician and a more loyal friend never lived."

Dr. ABBOTT was too deeply moved to give proper expressions of his feelings. He had known the deceased since his student days and loved him better than anyone except his own family.

Dr. LUCIEN HOWE said that the advisability of holding such meetings as these had been questioned. He thought that the tributes just paid so feelingly by friends answered that argument. We ought to meet to pay proper respect to members who fall in the ranks. Dr. Folwell was a good type of what was one of Nature's gentlemen and a true family physician. He recalled the days when together with the departed and others they sat in the rear rows at the meetings of the profession while the front seats were occupied by men whose names we now revere. Then the middle rows moved forward and the others took second place. In time these dropped out, and now the seats in the front rows are again becoming vacant.

The memorial was adopted and the society adjourned.

IN MEMORIAM.

MAHLON BAINBRIDGE FOLWELL, M. D.

MEDICAL DEPARTMENT UNIVERSITY OF BUFFALO.

At a meeting of the Faculty of the Buffalo Medical College, held Wednesday evening, December 11th, the following memorial was adopted and ordered spread upon the minutes :

We, the Faculty of the Medical Department of the University of Buffalo, wish to place on record an expression of the great sorrow which we feel for the loss we have sustained in the untimely death of Dr. M Bainbridge Folwell.

Dr. Folwell has been connected with the College for many years,—first as a student, then as Demonstrator of Anatomy, later as Clinical Professor of Dermatology, and finally as Professor of the Diseases of Children. In all of these capacities he has fulfilled the duties of his position with great ability and untiring faithfulness. We feel his loss most deeply, for we know that in him the College has lost not only a good teacher, but a devoted friend.

While we shall miss him in his connection with the College, to a still greater degree shall we feel his loss as a man and a companion. He was "true and just in all his dealings," faithful and courageous in the discharge of his duties—a man who could always be depended upon to do what he thought was right. His professional abilities were of the highest order, and his social characteristics such as to make him a general favorite. We extend to his wife and family our sincerest sympathy in this their terrible affliction, and share with them in their heartfelt regret that one so necessary to his family, so useful in the

community and so endeared to his friends by many kindly acts, should be thus cut off in the prime of life.

MATTHEW D. MANN,
CHARLES CARY,
JOHN PARMENTER,
Committee.

Progress in Medical Science.

GENITO-URINARY AND SYPHILITIC DISEASES.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo. N. Y.

LINEAR ELECTROLYSIS.

FORT, of Paris, (*N. Y. Med. Jour.*, Nov. 16, 1895,) describes an "electrolyser" devised by himself. Fort alleges that his instrument is more effectual, more convenient and has none of the disadvantages and imperfections of the ordinary electrode. He also states that he has operated in more than 2,500 cases without serious accident and without the loss of a patient.

The electrolyser consists of a long, flexible and slender bougie, containing in the middle a projecting, smooth, dull platinum blade, connecting with a platinum wire, covered with a coating of gutta percha. The long, flexible bougie serves as a guide to prevent any false passage. The average current strength used is thirty milliampères. This method works best in small soft strictures.

GUAIACOL AS A LOCAL ANESTHETIC.

LUCAS CHAMPIONNIÉRE and ANDRÉ (Paris) report that guaiacol applied locally acts as an anesthetic. They used solutions in sterilised olive oil, 1 part in 10 and 1 part in 20 and injected a syringeful, about 5 to 10 centigrams. These injections produced sufficient anesthesia for pulling teeth and for minor surgical operations. It requires 5 to 8 minutes for the full effect to manifest itself.

Laborde, Gilbert, Doyan and others are studying the effects of guaiacol. It is well established that this remedy produces decided local antipyretic and anesthetic results. It is stated that guaiacol is as powerful a local anesthetic as cocaine.

The abstracter uses guaiacol in castor oil, from 15 to 30 m. to the ounce, as a lubricant for urethral instruments. The castor oil is very viscid and the guaiacol is anodyne, so that the combination makes an ideal lubricant for this purpose. The guaiacol, if used too strong, will cause momentary smarting.

Eucalyptol may be added for esthetic and antiseptic purposes. We have not used it in cutting operations, but find that it takes the place of cocaine in other work.

HYDROCELE.

MONTGOMERY, J. M. C., reports a case of hydrocele in the female (*Therapeutic Gazette*, Nov. 16, 1895). A hydrocele in the female is rare. It was diagnosticated by exclusion and operation. There was an accumulation of fluid in the reduplication of the peritoneum over the round ligament, the remains of the canal of Nuck. This tumor presented the appearance of hydrocele in the male. It was situated over the ring which was enlarged. The sac was cut down upon and opened, when a discharge of serous fluid occurred. There was no presenting of omentum or strangulated tissue. The sac was cut away and the muscular ring closed by catgut sutures. She suffered severe pain without nausea or vomiting.

A TEST FOR INCIPIENT DIABETES.

NOORDEN (*Medical Record*) states that 100 grains of grape sugar administered to the normal subject has no effect, but in the incipient diabetic and in cases having a hereditary tendency thereto, produces glycosuria. This, if experience proves it to be correct, will be a very important diagnostic procedure.

A CASE OF URINARY SUPPRESSION.

MCBURNEY (*Annales of Surgery*, August, 1895,) reports a case of suppression of the urine after a surgical operation. Within twenty-four hours nausea began, followed by vomiting, headache and symptoms of uremic poisoning. There was no voluntary discharge of urine and only 4 drachms were obtained by catheter in twenty-four hours. He injected a quart of salt solution into a vein of the arm. In the course of a few hours the patient voided 34 ounces of urine and steadily convalesced.

Dickinson, in the *British Medical Journal*, calls attention to the fact that patients may be aroused from diabetic coma in a few minutes by saline infusion.

THE TREATMENT OF HYDROCELE—INJECTION OF IRRITATING SUBSTANCE IS OFTEN VERY PAINFUL.

NICAISE (*British Medical Journal*, June 5, 1895,) advises drawing off about one-third of the fluid and then passing into the sac 3 or

4 centimeters of a 1 per cent. solution of cocaine, the remaining fluid acting as menstruum. The scrotum is gently manipulated and after four or five minutes the remainder of the serous fluid is drawn off. Then inject iodine pure, or diluted one-third with water, again manipulate the scrotum four or five minutes and allow the iodine to escape. The operation is painless.

This procedure utilises a natural aseptic fluid as the excipient and the quantity of cocaine absorbed from a serous is less than from a watery solution.

INFECTION OF THE URINARY TRACT.

BASTIONNLI (*British Medical Journal*, Oct. 26, 1895,) reports the results of his bacteriological examination of the urine in thirty-seven cases of cystitis. Microörganisms were present in every case. In twenty-five out of the thirty-seven cases, only one organism could be cultivated.

The organisms most frequently found (in twenty-one of the thirty-seven cases) were microbes belonging to the coli bacillus group, including Eberth's.

In nineteen cases there had been no catheterisation or other surgical interference.

As a result of his experience with rabbits, he states that unless pus and microörganisms are found in the urine, cystitis is not present. That by whatever pathway microörganisms enter the bladder they only induce cystitis when there is some preëxisting morbid condition of the mucosa or some impediment to the free flow of the urine.

Under such conditions the germs multiply and, insinuating themselves between the epithelial cells, cause diapedesis, suppuration and local necrosis, finally passing through the lymphatics into the circulation and system generally. These experiments indicate that microörganisms will not cause cystitis, although present in the urine, except there be some lesion of the mucosa or urinary stasis, but in combination with these conditions they are efficient causes of inflammatory action.

TREATMENT OF SYPHILIS AT THE AACHEN SPRINGS.

BOGART gives an interesting report of his visit to this ancient and famous health resort. (*Brooklyn Medical Journal* for Dec., 1895) These springs were known to the Romans and were made famous as a health resort by Charlemagne.

These springs belong to the class thermæ or hot water. The temperature of the waters used for therapeutic purposes is from 38° to 72° centigrade, 84° to 162° F.

These springs are rich in sulphur and alkalies and are classed as alkaline muriatic sulphur water. They contain from 22 to 28 grammes chloride of sodium, 4 to 5 grammes of sulphites and 8 to 12 grammes of carbonates to 10,000 c. cm.

The douche and vapor baths have a greater and more marked effect in stimulating tissue metabolism and secretion than do the immersion baths, especially promoting the excretion of urea and uric acid.

A bath in Aachen of 95° F., of half an hour's duration, makes the skin moist and soft and the chlorides and bicarbonates in the water free it in the simplest and most agreeable manner from adherent scales. Moreover, by the opening up of the sebaceous and sweat ducts, all obstructing masses of secretion are easily removed. Whilst these circumstances favor the increased excretion of gaseous and fluid substances, both during and after the bath, the skin is also prepared for taking up medicinal substances, which are employed with effect in the course of certain methods of treatment.—*Brissel, Aachen als Kurort.*

The Aachen treatment of syphilis is by mercurial inunction (Sigmund), in connection with the most scrupulous attention to hygiene and nutrition.

Brandis announces the following rules for the inunction treatment of syphilis: 1. The body must be adequately prepared for the absorption of the mercury and the gray ointment must always be administered carefully and in sufficient quantity. 2. The body must, during treatment, be preserved sound. 3. The inunction treatment must be carried out long enough. 4. The unguentum hydrargyri cincreum of the German pharmacopeia is used, which differs from ours by containing one-third less mercury and twice as much suet, so that the German preparation is weaker and softer, all of which renders it more suitable for inunction.

The amount of ointment at each séance is from 4 to 10 grammes (1 to 2½ drachms). The rubbing lasts twenty minutes and is done by experienced masseurs, in connection with the baths. The remedy is applied to the sides of the body, changing to other parts, according to its effects upon the skin and continued, if there be no mishaps, for eight or ten days after the syphilitic symptoms have subsided. To prevent stomatitis, camphorated chalk and acetate of alum are used to cleanse the teeth and mouth. Mercu-

rial diarrhea is generally avoided by the daily evacuation of the bowels with the mild laxative action of the water, taken internally. Iodide of potassium is but little used.

As to duration of treatment and prognosis, Drs. Brandis and Schumacher say: so long as the healing of a syphilitic affection progresses under the action of mercury, we go on with its administration, and we combine with it other remedies when the healing process comes to a standstill. When to discontinue the inunctions depends upon individual conditions. In most cases, treatment is resumed after one to two weeks.

PEDIATRICS.

REPORTED BY MAUD J. FRYE, M. D.
Clinical instructor in diseases of children, Medical Department, University of Buffalo.

PYGOPHAGUS.

DR. JACOBI (*Archives of Pediatrics*, Oct., 1895,) reports a case occurring in the practice of Dr. Sigmund Tynberg. The term is applied to a double monster, consisting of two complete individuals united in the region of the sacrum or coccyx. The sex in this case was female. They were united below the third sacral vertebra, the sacra united on one side. Each child had its own complete generative organs and each its distinct circulatory apparatus. The anus was common, the rectum divided by an antero-posterior septum. The spinal cords did not communicate. The twins lived nearly five months, one dying eight hours before the other. Only thirteen similar cases are on record.

NASAL CATARRH.

BERGMANN (*Archives of Pediatrics*, Oct., 1895,) treats the noses of children, even infants, suffering from a cold in the head, after the plan of Henoch, applying a 2 per cent. solution of silver nitrate with a brush. The following day the application may be repeated. The solution has always proved inoffensive and will, he believes, do much toward preventing deflected septum and hyperplasia of the post-nasal adenoid tissue.

A DANGER OF PASTEURISED MILK.

Archives of Pediatrics (Sept., 1895,) editorially says: A most important detail is the rapid cooling after the application of heat.

A temperature of 167° F. kills all pathogenic germs, but it does not kill their spores. If the milk, after heating, is not properly cooled and is allowed to stand in a warm place, it may remain at a temperature exactly adapted to the growth and development of these spores. The process thus becomes a source of danger rather than a safeguard.

MODIFIED MILK.

WORCESTER (*Boston Med. and Sur. Jour.*, Sept. 19, 1895,) gives the Dresden modification of cow's milk as follows: white of one egg, one pint of cow's milk of 9½ per cent. richness in fat, one and one-half pints of water, thirteen drams of milk sugar. Sterilise milk before adding other ingredients. Sterilise milk sugar in a sealed jar. All articles used in preparing the food should be sterile. Wash the egg in absolute alcohol, break, and stir the milk sugar slowly into the white. Add the water slowly and strain into the milk, previously cooled to below 100° F. Pour into bottles and stopper with sterile cotton. With care in preparation, the mixture will keep for days. The egg supplies a substitute for lact-albumin, which the ordinary modifications lack.

MATERNAL FACTORS IN RICKETS.

GARROD and Fletcher (*Brit. Med. Jour.*, Sept. 21, 1895,) enumerate as the most important maternal factors in the causation of rickets the following:

Antepartum: (1) Ill-health, malnutrition or disease of mother during pregnancy. Phthisis concurrent with pregnancy is a most important factor. (2) Want of fresh air and exercise during pregnancy. (3) Numerous and rapid pregnancies. (4) Multiple pregnancies. (5) Age of mother at birth of child. A mother advanced in life is more apt to produce rickety children than a younger woman. Postpartum or location factors are: (1) Deficiency of milk in quantity or quality. (2) Mother's health during lactation, menstruation and pregnancy occurring during lactation. (3) Over-lactation.

Cases illustrating the influence of these several factors are cited. In many cases many of the maternal factors may come into play in causing the disease. These factors have an important bearing upon the prevention and treatment of the disease,

although obviously some are beyond the control of the medical attendant.

THE LOCAL TREATMENT OF THE SKIN.

SEIBERT (*Archives of Pediatrics*, Sept., 1895,) has observed beneficial effects from the use of 5 per cent. ichthyol ointment in cases of erythema nodosum, peliosis rheumatica, scarlatina and measles. In scarlatina the change for the better is striking. The swollen red skin shrinks and turns pale brown, the temperature declines three to four degrees within a few hours, and the nervous, itching, peevish child becomes quiet, better humored and usually goes to sleep without coaxing.

ENTERIC FEVER IN INFANCY.

NOYES, (*Journal Am. Med. Ass'n*, Sept. 28, 1895,) in a valuable article on the subject, says: Typhoid fever occurs in infancy very commonly in epidemics, also sporadically where possibly the disease is overlooked. The pathologic changes in infantile cases, while distinct, are less severe than in adults. There is generally no ulceration of Peyer's patches.

The diagnostic symptoms characteristic of infancy may be briefly stated as follows:

1. Any long-continued fever which does not yield to quinine, especially if of gradual onset with no existing condition of throat, lungs or bowels to offer an explanation. If the continuous fever is well borne it is still more suggestive of typhoid.
2. The lack of acute symptoms of an intestinal nature is more characteristic of typhoid fever than are violent symptoms. Constipation is noted in many cases to be succeeded by diarrhea at the end of the first week. Sordes is far less frequent than in adults.
3. Rose spots are to be expected in most cases.
4. Symptoms of headache frequently occur.
5. An enlarged and painful spleen is an important symptom.
6. Tympanitis in most cases is moderate.
7. Bronchitis is as regular a symptom as in measles.
8. Angina may occur and will confuse the diagnosis.
9. Epistaxis and hemorrhage from the bowels are both rare.
10. The Eberth bacillus in the stools has not been positively demonstrated. The bacilli can frequently be found in the lymphatic tissues and the spleen. In a few cases they have been found in the blood, the urine and the buccal secretions.

11. Erlich's test, which is yielded only by typhoid, miliary tuberculosis, septicemia and cancerous cachexia, may assist the diagnosis.

The disease appears in three forms: Abortive, of short duration; a type resembling the ordinary adult type and a malignant form. Relapses are infrequent and convalescence, as a rule, is quicker and less complicated. The malignant form may be characterised by symptoms which simulate meningitis. In nearly all cases of this nature, simple hyperemia is all that the autopsies develop. The disease is to be looked for in this country in a mild or abortive form. A severe and prolonged case may be the result, not of simple infection by the typhoid bacillus, but a complication by other pathogenic bacteria.

ANTITOXIN IN DIPHTHERIA.

THE *University Medical Magazine* (Nov., 1895,) says: A careful weighing of all the evidence submitted upon the subject up to the present time seems to establish the following facts: that antitoxin is a curative agent far more efficacious in diphtheria than any remedy heretofore employed; that its injection is very rarely followed by serious local disturbances, such as abscess, and, perhaps, never when the preparation is pure and employed under antiseptic precautions; that a marked improvement in both the local and general symptoms of diphtheria is noticeable within twenty-four to forty-eight hours after the injection of the serum; that the antitoxin has a decided influence in preventing the spread of the false membrane into the larynx and trachea; that the earlier in the course of the disease the serum is employed the more favorable are the results; that it is distinctly more efficient in the fibrinous types of the disease than in the septic ones; that the liability to paralysis and albuminuria is not lessened by the use of serum, but, probably, somewhat enhanced thereby; that genuine nephritis, on the other hand, is less frequently observed in cases of diphtheria treated with antitoxin than with other remedies; that antitoxin may produce certain untoward symptoms, such as various cutaneous rashes, but that these are not serious in their nature and are unattended with danger to life; and that improvement in the methods of preparing the serum and more definite knowledge as to the manner of its employment have rendered the later reports even more favorable to its use than the earlier ones.

HIGH MORTALITY AMONG THE NEWLY-BORN.

CROCKETT (*Medical News*, August 3, 1895,) concludes: (1) The mortality of the newly-born is both absolutely and relatively disgracefully high. (2) Septic infection causes a part of this mortality, and is preventable. (3) Asepsis should be observed about the new-born child. Dirty fingers or instruments should not be introduced into the child's mouth in cases of asphyxia. The child should not be allowed to ingest pus with its milk. (4) The navel should be treated on modern surgical principles and have the personal supervision of the physician. (5) The physician should take the child's temperature as well as the mother's, bearing in mind that many of the septic diseases have an insidious approach, and that the importance of the thermometer cannot be overestimated. (6) The navel wound may be the path of infection without showing signs of local inflammation. (7) Close observation of the new-born infant will teach the physician much and benefit the child greatly.

PUBLIC HEALTH, HYGIENE AND BACTERIOLOGY.

Conducted by ERNEST WENDE, M. D.,
Health Commissioner of the City of Buffalo, N. Y.

NOVEMBER VITAL STATISTICS IN BUFFALO.

BY FRANKLIN C. GRAM, Registrar of Vital Statistics.

A DEATH rate of 12.33 per thousand for November, 1895, is a good contrast to 13.48 for the same month in 1894. This summarises the result of both months, although some of the details are interesting.

From communicable diseases there were 103 deaths, as against 115 in 1894. Ten died from senile debility, 3 from alcoholism, 16 from various kinds of cancer, 43 from diseases of the nervous system, 31 from the circulatory system, 57 from the respiratory system, 3 from appendicitis, and the remainder were distributed among various other causes, making a total of 346 deaths for the month. Of these, all but two were white, 198 were males and 148 were females. Twenty died by accident or violence, and 4 committed suicide. The nativities of these deceased were: from Buffalo, 175; other parts of the United States, 49; Germany, 58; Ireland, 26; Canada, 10; England, 11; Scotland, 3; Poland, 4; other foreigners, 6; unknown, 1.

I will present a similar table to the one given last month :

	Tubercu-losis.	Enteric Fever.	Diphthe-ria.	Diphthe-ritic Croup.	Mem-branous Croup.	Scarlet Fever.	Measles.	Pertus-sis.
Cases reported, Nov., 1895..	25	30	120	3	14	36	11	3
Deaths, Nov., 1895.....	33	13	26	1	12	0	1	3
Cases reported, Nov., 1894..	0	31	102	5	14	112	21	2
Deaths, Nov., 1894.....	39	16	25	8	10	1	2	0
Deaths, Nov., 1893	44	4	12	13	0	19	1	7
Deaths, Nov., 1892.....	36	13	18	15	0	8	2	5
Deaths, Nov., 1891.....	46	22	12	24	0	14	0	0

There were 644 births, 244 marriages, 30 premature births and 37 still-births during November, 1895.

Selection.

THE GOLD COMBINATIONS AS ALTERATIVES.[1]

[Illustrated.]

BY THOMAS HUNT STUCKY, M. D., PH. D.,
Professor of theory and practice and clinical medicine, Hospital College of Medicine, Louisville, Ky.

UNDER the above title the author, in an elaborate paper, reports a series of cases tending to show wherein and how the gold combinations known as arsenauro and meroauro exert their peculiar effects. The observations were conducted during the spring and summer months, when the public wards of the hospital were generally free from acute diseases and all medicines were withdrawn except those under consideration.

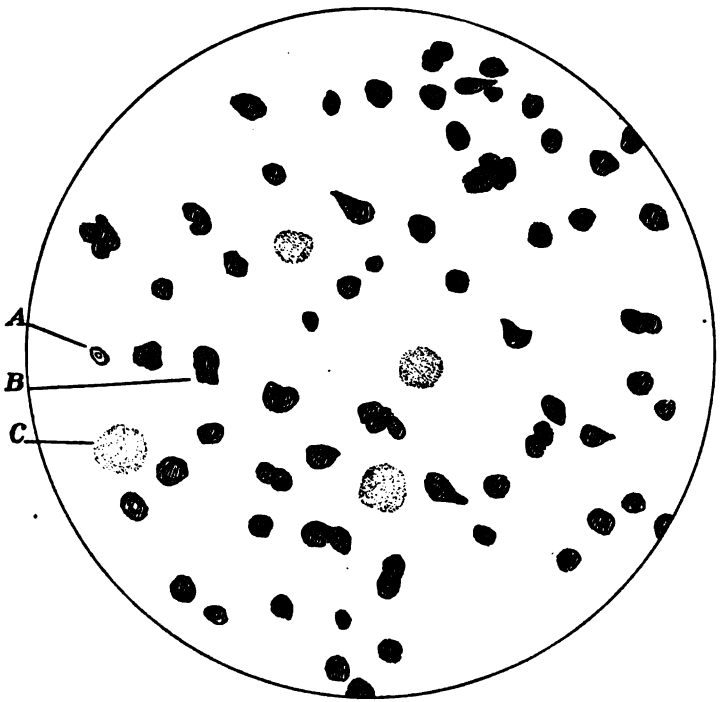
Eight cases are reported in detail, from which we extract two, the second and third, as follows :

CASE II.—F. P., aged 65 years, history of dissipation, admitted November, 1894 ; much jaundiced ; pain in right hypochondriac region ; pain and jaundice gradually disappeared, leaving him much emaciated ; anorexia ; bowels constipated ; diagnosis, cirrhosis of liver. Urine shows no marked deviation from health. Blood contains many small and large red cells, the red corpuscles numbering 3,253,000 ; hemoglobin, 52 per cent. Treatment, arsenauro, eight drops every four hours, hypodermically, commencing April 22d.

May 5th.—Patient appears to be stronger, remaining out of the bed and not requiring purgatives as formerly. Examination of the blood at

1. Abstract of a paper read at the 21st Annual Meeting of the Mississippi Valley Medical Association, and published in the *New York Medical Journal*, November 23, 1895.

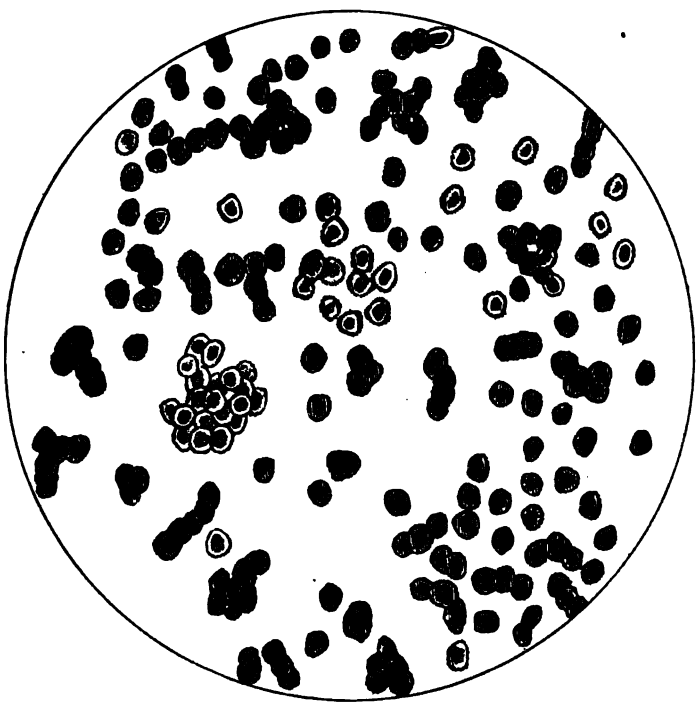
FIG. I CASE II.



A. MICROCYTE. - B. MACROCYTE. - C. LEUCOCYTE.

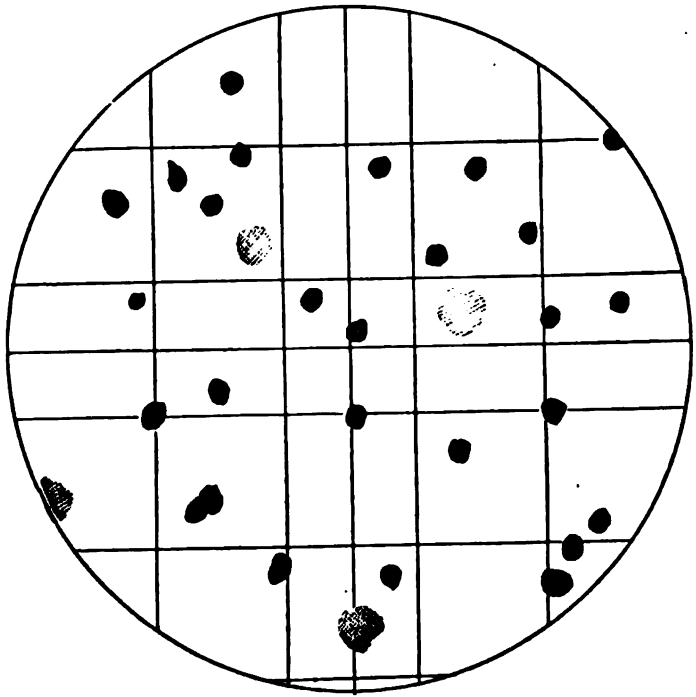
Case of F.P. – *CIRRHOSIS OF LIVER WITH JAUNDICE, BLOOD CHANGES OF SEVERE SECONDARY ANÆMIA.*

FIG. II CASE II.



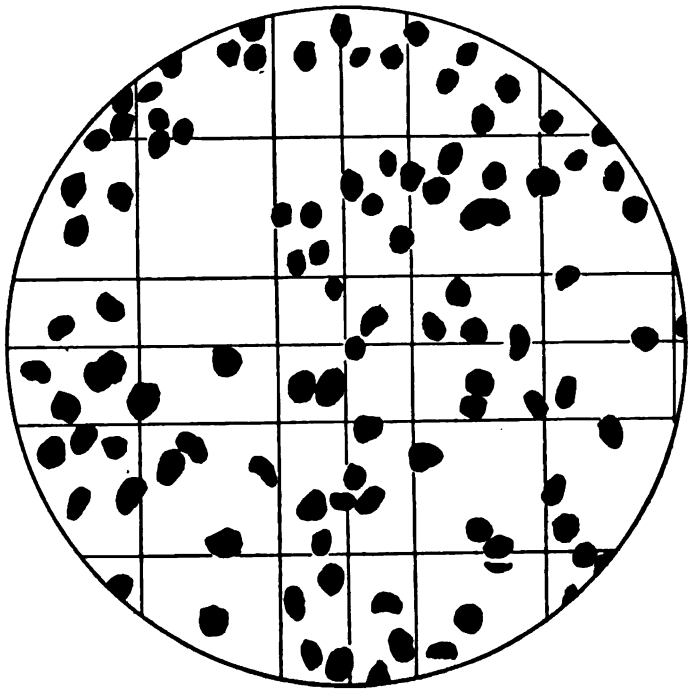
SHOWS INFLUENCE OF ARSENAURO UPON THIS CONDITION BY THE GREAT INCREASE IN NUMBER, SIZE AND QUALITY OF RED BLOOD CORPUSCLES

FIG. I CASE III.



Case of JOHN B.- *CHRONIC PULMONARY TUBERCULOSIS, SHOWING MARKED DECREASE IN THE RED BLOOD CORPUSCLES.*

FIG. II CASE III.



Case of JOHN B.- *FOUR WEEKS LATER, THE RED BLOOD CORPUSCLES HAVING INCREASED 1,600,000 TO THE C.C.*

this time shows 4,300,000 red corpuscles to the cubic millimeter; hemoglobin, 65 per cent.

31st.—While still using the gold combinations there was a diminution in the number to 3,850,000 and in hemoglobin to 60 per cent.

June 19th.—Patient seems to be in fairly good condition. During the past week he suffered from abdominal pain, diarrhea following this attack. Treatment continued.

20th.—Examination shows 4,650,000 red corpuscles; hemoglobin, 75 per cent.

While there have been fluctuations in the condition of the patient, he is after all much better as regards appetite and bodily vigor.

CASE III.—John B., teamster. Notes of this case began in 1893. He then had flattening, especially of the right side, diminished resonance, pain on pressure in supraclavicular region, nocturnal cough, muco-purulent expectoration. The tubercle bacilli could not be found, and many slides examined during the following two years failed to reveal their presence.

Changes in the physical signs have been slow, the area of dulness has extended to the right side, the heart is drawn to the right. The left lung presents the same signs as the right, but not so pronounced; he has constant fever, the evening rise usually 101° and not uncommonly reaching 103°. The treatment in this case has been varied, including strychnine, cod-liver oil. hypophosphites and the ferruginous combinations. There had been no improvement in his general condition for three months before the administration of mercauro. He remained in bed, appetite poor, anemic, bowels constipated.

No examination of the blood had been made prior to April 20th, the day he was placed upon mercauro. At that time the blood corpuscles were 3,400,000, hemoglobin 65 per cent. About ten days after this treatment was instituted there occurred a very remarkable increase in the appetite, with the complete disappearance of constipation. Four weeks later, after having been in the hospital for two years, he was sufficiently recovered to leave. The corpuscular count was normal, hemoglobin 80 per cent., and he had gained ten pounds in weight.

. . . . .

The author adds:

While not attempting to solve a question which has puzzled experienced men, a few remarks regarding the chemical differences of these agents may furnish a groundwork for an original theory.

1. The chloride of gold and sodium of commerce, so called, is not such in fact, but merely chloride of gold mixed with chloride of sodium; therefore, for any chemical purpose chloride of gold only need be considered.

2. Chloride of gold is an extremely unstable compound, its identity being readily destroyed by light or air, while the addition of the least amount of organic matter will almost instantly convert it into albuminate, which, upon contact with the mucous membrane or skin surface, (the albumin thus formed,) is extremely difficult of solution.

3. Gold bromide, even without the addition of the other material, is a more stable salt, is less sensitive to light, etc., and, when in combination with bromide of arsenic in aqueous solution as found in arsenauro and mercauro, this property of stability is increased to a seemingly very great extent.

4. This change in its attitude with reference to outside influences, from a chemical standpoint, may account for its altered therapeutic properties, and this may be said not only as regards the changes due to the combined therapeutic properties of the combination of gold and arsenic, but with reference solely to the probable modified or intensified quality, which appears to be a changed therapeutic equivalent in the gold itself.

5. As to what I conceive to be the reason of its changed or intensified therapeutic quality of gold in arsenauro and the like. The arsenic bromide added to this solution appears to have rendered the gold more tenacious of its dissolved condition, thus permitting it to be taken unaltered into the circulation.

The finding of gold in the urine after the administration of these solutions would appear to confirm this view.

Correspondence.

MYDRIATICS IN REFRACTION.

To the Editor:

SIR—The article by Dr. Satterlee in the December issue, on mydriatics in refraction, should not be allowed to pass without challenge. I believe it to be false in teaching, dangerous in practice and calculated to do an infinite amount of harm. The consensus of opinion of the leading ophthalmologists of the world is against him. This he practically admits when he says: "One or two French ophthalmologists and a few in this country are all that I call to mind who have discarded the routine use of mydriatics." I had it in my mind to quote him authorities in support of their use, but on making references I find such an embarrassment of riches that I refrain, and will only refer him to such writers as Donders the Great, Soelberg Wells, Brudenel Carter, Fuchs, Noyes,

Stevens, de Schweinitz, Jackson and in fact anybody of note who has written at all on refraction. The more modern and progressive the man, the more does he dwell on the necessity of refracting with the accommodation paralysed.

Taking Dr. Satterlee's objections in order:

1. The dilated pupil with a paralysed accommodation is an unnatural condition of the eye. The proof of this is the fact that the patient cannot afterward wear the glass accepted under the influence of the mydriatic.

Answer.—The dilated pupil is no more unnatural than is the condition that calls for the dilatation. If we were dealing with a normal organ no medication would be necessary; dilatation is part of the treatment. The same objection could be urged against distending a dilated stomach with $C.O._2$ in order to map out its abnormal dimensions, or against the dilatation of the sphincter ani to properly treat hemorrhoids. The proof offered is no proof at all; in the vast majority of cases the patient will wear with comfort a cylindrical lens accepted under a mydriatic, will always wear a minus lens, either simple, spherical, cylindrical or a combination of both, and in many instances will wear the full hyperopic correction, though it is deemed wiser in the majority of cases to make some allowance for the hypertrophy of the ciliary muscle and reduce the strength of the lens, but the most modern teaching is to give as nearly as possible a full correction.

2. The cornea and lens are frequently perfect in curvature in the immediate vicinity of the normal pupil, while a short distance away they have a greater curvature in one meridian than in another. The dilated pupil would bring out these imperfections that the normal pupil would not.

Answer.—The second part of this question answers the first. In a badly-illuminated room the pupil is dilated more or less, and in some individuals very widely, and particularly so in the class of patients most likely to suffer from eyestrain,—the anemic and the hysterical. Is a patient to suffer with asthenopia or sundry reflex ills because at the time of the examination, owing to the glare of the ophthalmometer disc, or the brilliant illumination of the ophthalmoscopic mirror, the pupil is contracted and no astigmatism is manifest?

3. Many people are weeks recovering from the mydriatics.

Answer.—I do not agree with Dr. Satterlee in his choice of an adjective. He would have been nearer the mark had he said "a

few." Shall we deny the many the inestimable advantage of a correct diagnosis because a few people are inconvenienced for a few days? We might with equal reason eliminate opium from the materia medica because of some few people's idiosyncracies. In an experience of some thousand cases in private practice, and several thousand in infirmary work, I have yet to see a case in which the effect of the mydriatic (homatropine) lasted more than three days at the outside, and the vast majority had recovered in thirty-six hours.

4. In some cases of glaucoma the increase in tension is slight, and by no means as easily detected as the average text-book would lead one to infer. Any mydriatic in these cases produces permanent injury to the sight.

Answer.—Glaucoma does not usually affect patients under the age of presbyopia. At this age, no mydriatic is necessary, as Nature has paralysed the accommodation for us. This great danger is, therefore, to a great extent obviated. Still there are some few cases which occur earlier, and it has been noted in quite young patients, but these cases are extremely rare, and if the ophthalmologist makes a routine practice of using the ophthalmoscope with every patient before using a mydriatic, I do not see how he can make such a blunder.

5. Hyperesthesia of the retina exists in many cases of anemia, hysteria and the like. A large pupil allows still more light to irritate the sensitive retina and greatly increase the discomfort to the patient.

Answer.—Hyperesthesia of the retina is due, in most cases, to an error of refraction, and the cure is a properly fitted pair of spectacles. If Dr. Satterlee will tell his patients to wear a pair of smoked glasses until the effect of the mydriatic has disappeared, he will find this discomfort reduced to a minimum.

6. In the majority of cases of refraction the mydriatic is unnecessary.

On this point I take direct issue with Dr. Satterlee. I learned to do my refractive work without a mydriatic, and have learned in the bitter school of experience that my work without a paralysed accommodation was not satisfactory. I am familiar with the ophthalmometer, and am aware that it is a valuable instrument, though more in the way of suggestion than as an instrument of precision. At its best, however, it only determines whether or not astigmatism is present, tells you nothing as to its variety, whether simple or compound, whether hyperopic, myopic or mixed; tells you nothing as to the presence or absence of hyperopia

or myopia, but deals solely with the asymmetry of the cornea, and is worse than useless in lenticular astigmatism. I can recall case after case where the astigmatism as determined by this instrument was utterly at variance with result as shown by the test lenses, not only in amount but in direction of the axis. I have seen differences as great as three diopters and repeatedly as much as one diopter. I have had the pleasure of re-refracting cases that have been wearing glasses prescribed by ophthalmologists who do not believe in a mydriatic, and who trust to time (and lots of it), the ophthalmoscope and ophthalmometer in their refractive work, and I have been able with the help of a mydriatic to prescribe glasses that were at least comfortable, which is more than could be said of the spectacles that had been prescribed without its use. A few cases by way of illustration: E. J. V. was wearing — 1.25 D. sph., took under a mydriatic + 1.50 D. sph.; J. M. was wearing + .50 D. sph., took under a mydriatic + 1.50 D. sph. ⊃ + .50 cyl. axis 90°; A. L. H. was wearing + .75 D. sph., took under mydriatic + .50 D. sph. ⊃ + .75 cyl. axis 90°; Dr. G. H. was wearing — 4.00 D. sph. each, took under mydriatic R. E. — 4.00 D. sph. ⊃ — 1.00 cyl. axis 140°, L. E. — 3.00 D. sph. ⊃ — 1.50 D. cyl. axis 15°; Mrs. H. S. wearing + 1.00 D. sph., took under mydriatic — 1.50 D. sph. ⊃ + 3.00 D. cyl. axis 90°; and I could recite dozens of similar cases, but these are sufficient to prove to me that these cases were not properly fitted without a mydriatic, and also proves to me the necessity of using one.

We are not now limited to the use of atropine with its two weeks' siege of blurred vision. Homatropine, the effects of which disappear in thirty hours in most cases, and in some less, and never exceeds three days, is all that is necessary as a rule.

A properly fitting glass will, I agree, relieve asthenopia, but it can be more accurately adjusted when the patient's accommodation is paralysed temporarily. We should not take a retrograde step and place ourselves in the same plane as the "clockmaker" and the "oculo-optician," as we most certainly shall do if we give up the use of our beneficent mydriatics. I prefer to rank myself with the large army of expert ophthalmic surgeons of this country who do use a mydriatic for refractive purposes, rather than with the small band of heretics comprised of "one or two French ophthalmologists and a few in this country" who do not.

ARTHUR G. BENNETT, M. D.

213 FRANKLIN STREET.

REFRACTION WITHOUT MYDRIATICS.

To the Editor :

SIR—In further elaboration of my article on the use of mydriatics, permit me to say that no new method was ever advocated that did not bring out expressions of incredulity. Believing in "holding fast to that which is good," many ignore that which is better.

I realise that the weight of accepted authority is against me. Most of the authors have very little time to devote to refraction and the kind of work many of them do is very indifferent. If this was not the case we would not hear so much about muscle cutting as a lucrative substitute for proper refraction.

Mydriatics give the ophthalmologist a false sense of security. Certain cases are on record of ciliary spasm that two weeks of atropia would not relieve. A case at present under my observation has had mydriatics galore by two well-known oculists, both prescribing a minus lens over one eye. I prescribed a plus glass, relieving the head symptoms and obtaining $\frac{20}{20}$ vision.

RICHARD H. SATTERLEE.

189 DELAWARE AVENUE.

THEY are getting after the "vitapaths" in Cincinnati, and very properly. One of them was lately arrested and fined for practising without a license. Judge Dustin said, in pronouncing sentence: "Men who knowingly go into a sick room and prevent anything being done for a dying man by silly incantations and laying on of hands are responsible for his death and ought to be on a par with a murderer in the eyes of the law. God help the dying man who relies upon you or any of the so-called graduates of quackery. You speak of vitapathy being of a higher power than medicine, and you say you ordain ministers at the same time you matriculate vitapathic physicians. Your methods are an insult to intelligence, their practice is a criminal abuse of ignorance and your college a disgrace to civilisation." We congratulate the judge upon his elegant characterisation.—*Atlanta Med. and Surg. Jour.*, Oct., 1895.

BUFFALO MEDICAL JOURNAL.

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EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

All communications, whether of a literary or business nature, should be addressed to the managing editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

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THE ERIE COUNTY HOSPITAL AGAIN.

A FEW months ago we gave our readers extended comments on the evolution of this hospital and suggestions as to its further improvement. Since that time there have been many meetings between the hospital staff and a committee of the board of supervisors, whose special province is to exercise watchful care over the almshouse and hospital.

Though these meetings of late have been spirited and interesting, during which the various aspects of the case have been set forth clearly and ably by the staff, we yet fail to observe that any impression has been made upon the county legislature that promises any reform in the conduct of the hospital. Indeed, according to the latest published newspaper reports, any expectation of relief at the hands of the present board of supervisors is very remotely dim and nebulous.

The chief bone of contention just now is the administrative separation of the hospital from the almshouse. To the casual observer this would seem to be a most commendable change. There appears to be no good reason why the keeper of the almshouse, an elective county officer subject to all the vicissitudes of politics, should exercise authority over the hospital. We know how difficult it is to make politicians yield any vantage ground, which even a poorhouse may be supposed to give them, but we cannot believe even they will long resist the better instincts of humanity when it appeals with so much justice in its cause. It has been affirmed that there is an undertow of opposition to this proposed divorcement of authority, on the part of the controlling spirits of the two other hospitals, but we cannot believe this to be true. Surely there are no men on the staff of either one of the older hospitals—

none who has any right to speak authoritatively—that would take such an unwarranted position, one in opposition to the spirit of this humane and progressive age. We should be sorry to believe this true of any members of our philanthropic and humane profession.

The matter may then be said to have settled down to a contest between the hospital staff, supported by every philanthropic and charitably disposed citizen on the one hand, and the politicians, supported by the spoils-hunters, on the other. The ultimate result of such a contest cannot be doubtful. The principle of right may be somewhat delayed in the exercise of its authority, but it must surely triumph in the end. It always has; it always will.

It seems to us that the proper way would be to organise a city and county hospital to be supported by appropriations from the city and county treasuries, each territorial division to contribute according to the number of patients each respectively sends to be treated within its walls. Such a hospital should be governed by commissioners from each branch and should be presided over by a medical superintendent, nominated by the medical staff, and confirmed by the commissioners. These commissioners should be chosen from among the wealthiest and most philanthropic citizens residing in the city and towns. Such a hospital would be in a position to command the respect of the entire population. The almshouse itself should be removed to a more rural location.

Cincinnati, a city close to Buffalo in size, maintains a hospital at municipal expense that is one of the most successful institutions of its kind in the country. Buffalo, destined to grow rapidly in the future, with its largely increasing manufacturing interests, must necessarily provide itself with ever-increasing hospital accommodations. Trolley ambulance service, which cannot be much longer delayed, will place each and all the hospitals within easy reach. One of the prides of greater Buffalo should be its adequate hospital accommodations and its electric railway ambulances.

TOPICS OF THE MONTH.

It is high time that an attempt was made to regulate by law the giving of medical expert testimony in the courts. A recent Albany dispatch states that an important measure of this kind will be introduced into the legislature during the coming session. Heretofore any physician, no matter how shallow his knowledge, has

been called upon to testify in important cases where even life was at stake. It is now proposed to abolish expert medical testimony in this state, in so far as it is now given by physicians of any degree of ability who may be called by the lawyers in a trial case.

As a substitute for this time-honored but dangerous fashion several prominent members of the medical profession, whose names cannot at this time be mentioned, have drawn a bill which will be very radical in its terms and will lodge the right to give medical expert testimony in a nonpartisan board appointed by the Governor, by and with the advice and consent of the Senate. The province of the board, according to a telegraphic synopsis of this bill, will be to act in the capacity of instructors and advisors to the courts. It will be large enough to provide amply for all criminal trials and the quorum will be small enough to allow sections of the board to act with the courts in various localities.

The members will be chosen from the ranks of the most expert alienists, having a high ascertained qualification. The function and power of the board will be to examine with reference to the sanity or insanity of any accused person and will have the power to call for any evidence throwing light upon the case. When any section of the board disagrees upon the questions involved, the whole board may be called together for a decision. Under no circumstances will any physician not a member of the board be allowed to testify in any of the courts of the state unless it be upon the absolute facts of the trial.

Any such expert may, however, appear before the board and give evidence. The matter of remuneration of the board has not yet been decided, and the bill may be amended so as to make the board consist of the medical heads of each of the state hospitals for the insane in the state.

This change is so radical that the proposed measure will be sure to call forth a great deal of discussion, hence we devote considerable space to an abstract of the bill.

ELECTRIC railway ambulances, as we have heretofore shown, are very much needed in Buffalo. Let the Buffalo Traction Company announce, in addition to the various improvements that it has already proposed to make in our street railway service, should it obtain a charter, that it will place trolley ambulances in service as soon as its road opens. It will thus show its readiness to adopt any and all improvements that are needed so much in Buffalo.

We affirm, notwithstanding the many assertions to the contrary, that no city in the Union of the size of Buffalo has as inefficient street railway service. It is only a short time since straw was abolished in the cars and a still shorter period since the first car was heated in winter. It is astonishing what a disposition there is here for the citizens to plant themselves across the line of progress. But we have observed that the chief opposition to additional street railway service, as proposed by the Buffalo Traction Company, comes from people who ride in carriages.

THE special committee of National Guard surgeons, which the Surgeon-General appointed at the September meeting, held a spirited session in the 71st Regiment Armory, Monday, November 11, 1895. Major Herman Bendell, of Albany, presided, but Captain Burr, the secretary of the committee, was absent. The discussions which took place showed that the various members had given the matter of improvement of the medical department much thought since their appointment, and that they were harmonious on matters of most importance. But no report to the Surgeon-General was formulated. Many recommendations were agreed upon, among which the most important were the equipment of the guard with ambulances, the enlargement of hospital corps and the formation of regimental ambulance corps. But these matters and all others were recommitted to a sub-committee, of which Major Stimson, of the 7th Regiment, was made chairman, and this committee will make the final report to the Surgeon-General. The department is sorely in need of funds, and this fact will be made clear to the Commander-in-Chief through the Surgeon-General.

IT IS announced that an anti-noise league has been organised at Phenix, Arizona. Commenting upon this the *Maryland Medical Journal* says :

If noise disturbs places of that size, there is no wonder that the inhabitants of large cities complain against the clamor and the crying of hucksters, the clanging of bells and the rattling of vehicles of all kinds. Much of this noise is necessary, but some of it can be avoided and especially the ringing of bells and the blowing of whistles. Baltimore has a law forbidding steam railroad engines from blowing within the city limits, but the steamboats and the factories keep it up at certain hours at a deafening rate. In the morning, at lunch time and in the evening, the large factories blow for what seems to be a very long

time, and then the clocks, not all being alike; one whistle succeeds another, until for ten or fifteen minutes, at least four times in the day, these sounds are repeated.

In Buffalo the noise nuisance seems to be increasing rather than diminishing, notwithstanding the fact that numerous appeals have been made to the authorities asking that unnecessary and extreme noises be restrained.

THE *Comité Franco-Américain*, of Paris, has issued a pamphlet for the purpose of promoting the interest of American students in France. An advisory committee has also been formed in the United States, under the presidency of Professor Simon Newcomb, of Washington. In the pamphlet referred to is published a memorial by Professor Harry J. Furber, Jr., of Chicago, which was presented to the ministry of public instruction at Paris. Mr. Furber finished his college courses in the United States and then enrolled himself as a student at the German universities. He received the degree of Ph. D., at Halle, and then went to Paris, where he soon found that the French institutions of learning possessed all that is needed by American students who are desirous of completing their literary or scientific training by two or three years of post-graduate study.

This pamphlet, together with much other information on the subject, can be obtained by addressing M. Paul Melon, General Secretary of the Committee of Patronage for Foreign Students, 24 Place Malesherbes, Paris, France.

COMMENTING upon the resignation of Dr. Cyrus Edson and the expulsion of Dr. Edward C. Mann from the Medical Society of the County of New York, the *Journal of the American Medical Association*, in its issue of December 7, 1895, makes the following astonishing statement:

> It would appear that there has been sudden and unlooked for stimulation of the ethical conscience of a body that has for ten years or more been in affiliation with the "no code" state medical society. We trust that the change of heart is deep, sincere and not based on any alleged approaching bankruptcy of the New York profession. . . . . The quickening of ethical conscience in the society, whereby professional honor is appealed to by many who have heretofore objected to any ethical rules, shows clearly enough the absolute necessity for rules of some sort. "No code" may be extremely interesting as a theory, but it invariably has commercialism as its underlying basis.

This proved a sufficient reason for the *Philadelphia Polyclinic*, in its issue of December 14, 1895, to propound the following conundrums, which, in the vernacular of Dr. De Wolf Hopper Syntax, may be termed "corkers":

We should like to ask the *Journal* in all sincerity the following questions: First, is the signing of certificates of nostrums by a member of the New York County Medical Society, a no code institution, more culpable than similar action upon the part of a member of the American Medical Association? Second, is there any provision in the constitution or rules of the American Medical Association by which one of its officers who violates its code of ethics can be disciplined by the association itself in the absence of action upon the part of his local society?

We may with propriety add: Is it a greater moral crime against ethics to be a member of the Medical Society of the State of New York than to advertise in the various journals that one is prepared to go to any part of the county to do any sort of professional consulting or surgical work? We wait with some interest the *Journal's* answer to these pertinent questions.

Personal.

Dr. Herman G. Matzinger has severed his relation with the Buffalo State Hospital and has opened an office at 519 Franklin Street, Buffalo. He will give special attention to mental and nervous diseases.

Dr. W. G. Grove, of Buffalo, has removed his office and residence from 197 West Utica street to 89 Niagara street. Hours, 8–10 A. M., 1–3 and 7 P. M. Telephone, Seneca, 1022.

Dr. John S. Billings, Deputy Surgeon-General U. S. Army (retired), has been appointed professor of hygiene in the University of Pennsylvania.

Dr. and Mrs. Leon F. Harvey, of Buffalo, have gone to Southern California for the purpose of enjoying its genial climate during the winter.

Dr. George J. Engelmann has removed from St. Louis to Boston. His office is at 336 Beacon Street. Hours, 2–3.30.

Obituary.

MAHLON BAINBRIDGE FOLWELL, M. D.

DR. MAHLON BAINBRIDGE FOLWELL died at his home, 713 Delaware avenue, Buffalo, Tuesday, December 10, 1895, of pericarditis, aged fifty-four years. He was born at Romulus, Seneca County, N. Y., in 1841 and received his academic education at Hobart College, Geneva, from which he graduated in 1861. After spending a year in the study of medicine he entered the army as hospital steward of the Fiftieth New York Engineers, April 10, 1862; was promoted first-lieutenant, Company I, May 19, 1863; captain, February 1, 1865, and was mustered out with his regiment June 13, 1865. He was made brevet-captain and major, U. S. Volunteers, August 1, 1864, for gallant and meritorious services during the campaign before Richmond, Va. He was at the siege of Yorktown, served in the Fredericksburg and Peninsular campaigns, was at Chancellorsville, Mine Run and in the Wilderness campaign, also at the siege of Petersburg and in the Appomattox campaign in the spring of 1865.

After the close of the war he came to Buffalo and pursued his medical studies under Dr. Wyckoff, receiving his doctorate from Buffalo University Medical College in 1867. He afterward became associated in practice with Dr. George N. Burwell and in December, 1882, Dr. Folwell married Florence, daughter of Leonidas Doty, of Buffalo. He was a consulting physician at Buffalo General Hospital; attending physician at the Buffalo Orphan Asylum and at the Children's Hospital; and was clinical professor of diseases of children at the medical department, University of Buffalo. Dr. Folwell was a member of the Medical Society of the County of Erie, Buffalo Academy of Medicine, Buffalo Medical Club, the Liberal, Buffalo, Saturn and University Clubs and a companion of the Military Order of the Loyal Legion.

In another place in the JOURNAL Dr. Folwell's intimate personal and professional friends have testified in a fitting manner their opinions regarding his professional and social status and accomplishments. But it is appropriate for us to add that the estimate there given of his character and manliness is not overdrawn. Dr. Folwell was an ornament to the local profession of medicine, a physician of rare acumen and judgment who enjoyed

MAHLON BAINBRIDGE FOLWELL, M. D.

the confidence of a large clientèle, a man of sterling character and a citizen whose loss is deeply deplored by the entire community.

Mrs. Folwell and one son, Bainbridge, a lad of eleven years, survive.

DR. J. EDWIN MICHAEL, of Baltimore, died at his home in that city, Saturday, December 7, 1895, of chronic nephritis, aged forty-seven years. He was the eldest son of the late Jacob J. Michael, and was born and raised on his father's farm in Harford County, Md., on the borders of Chesapeake Bay. In early life he cultivated a taste for water sports and rural surroundings. His preliminary education was received at St. Timothy's Hall, Md., and Newark Academy, Del., and he graduated from Princeton College in 1871. At Princeton he was distinguished for skill in athletic exercises and at graduation was a splendid specimen of physical manhood. He received his doctorate degree from the University of Maryland in March, 1873, and after graduation spent a year abroad in study in the hospitals and medical schools of Europe.

J. EDWIN MICHAEL, M. D.

In the autumn of 1874, Dr. Michael was appointed demonstrator of anatomy in the University of Maryland; in 1880 he was promoted to the chair of anatomy and clinical surgery; in 1887 he was elected dean of the faculty of the University, and in 1890 was chosen professor of obstetrics, which chair he held until his death. For a short time he edited the *Maryland Medical Journal*, and at the time of his death was president of the Medical and Chirurgical Faculty of Maryland; fellow of the American Association of Obstetricians and Gynecologists; member of the American Surgical Association; of the Southern Surgical and Gynecological Association; of the American Medical Association, and of the various local medical societies in Baltimore.

Dr. Michael married Miss Susie Mitchell, of Harford County, December, 1875. His widow and six children, four sons and two daughters, survive him. Dr. Michael was a man of striking physical, intellectual and personal characteristics. He was a man of broad culture, great strength of character, an excellent teacher and a famous physician. He died in the midst of a useful professional life, mourned by his kindred and a large circle of devoted friends.

For the excellent picture that accompanies this sketch we are indebted to the courtesy of the *Maryland Medical Journal* and have condensed the foregoing remarks from an editorial in that *Journal* of December 14, 1895.

Society Meetings.

The Medical Society of the County of Chautauqua will hold its semi-annual meeting at the Sherman House, Jamestown, N. Y., on Tuesday, January 14, 1896, at 11 o'clock, A. M., under the presidency of Dr. E. S. Rich, of Kennedy.

The secretary, Dr. C. A. Ellis, of Sherman, has sent out the following program: Report of interesting case, Dr. Morris N. Bemus, Jamestown, N. Y. Report and presentation of case of fracture of the skull, Dr. E. S. Rich, Kennedy, N. Y. The abuse of some narcotics, Dr. C. E. Lundgren, Jamestown, N.Y.; discussed by Dr. Edward Rood, Westfield, N. Y., and Dr. L. P. McCray, Clymer, N. Y. Criminal abortion, Dr. James Murphy, Sherman, N. Y.; discussed by Dr. T. D. Strong, Westfield, N. Y., and Dr. E. A. Scofield, Bemus Point, N. Y. Intubation of the larynx, Dr. N. G. Richmond, Fredonia, N. Y.; discussed by Dr. George E. Blackham, Dunkirk, N. Y., and Dr. E. C. Lyman, Jamestown, N. Y.; Discussion on Pneumonia: (*a*) Pathology and Etiology, by Dr. J. C. Lewis, Panama, N. Y.; discussed by Dr. G. F. Smith, Sinclairville, N. Y., and Dr. J. W. Morris, Jamestown, N. Y. (*b*) Symptoms and diagnosis, by Dr. H. W. Davis, Falconer, N. Y.; discussed by Dr. V. M. Griswold, Fredonia, N. Y., and Dr. N. E. Beardsley, Dunkirk, N. Y. (*c*) Treatment, by Dr. Wm. M. Bemus, Jamestown, N. Y.; discussed by Dr. Laban Hazeltine, Jamestown, N. Y., and Dr. F. E. Lilley, Findleys Lake, N. Y.

A cordial invitation is extended to the medical profession of Chautauqua and adjoining counties.

ITEMS.

At a reeent meeting of the board of supervisors of the County of Chautauqua, a resolution was passed fixing a fee of three dollars with 25 cents mileage for examiners in lunacy in county cases.

The Jamestown Medical Society has already taken steps to defend its members against such an inadequate fee, and it is presumed that the County Medical Society will also take action on this subject at its forthcoming meeting.

The physicians of Chautauqua are combining in an association that has for its purpose the boycotting of "dead beats" and they will soon decline to render services for such characters without pay in advance. This timely action is commended to other medical organizations.

THE Medical Society of the County of Erie will hold its seventy-fifth annual meeting at the rooms of the Buffalo Academy of Medicine, 619 Main street, on Tuesday, January 14, 1896, beginning at 9 o'clock A. M. On that occasion the society will celebrate its seventy-fifth anniversary, the arrangements of which are in the hands of the following committee: Dr. Lucien Howe, chairman; Dr. Charles G. Stockton, Dr. H. Mynter, Dr. J. W. Putnam and Dr. W. H. Gail.

Dr. Franklin C. Gram, the secretary, has prepared the following program: (1) Order of business, according to the by-laws. (2) Some unavoidable accidents of intubation, by Dr. Geo. F. Cott. (3) Short history of the society, by Dr. F. C. Gram. (4) Reading of special act legalising this society and voting upon resolution of incorporation. (5) Epochs in local medical history; short addresses by: (*a*) Dr. John Hauenstein, First uses of chloroform and ether in Buffalo. (*b*) Dr. J. B. Samo, Cholera epidemics in Buffalo. (*c*) Dr. C. C. Wyckoff, Establishment and early days of the Medical Department of the University of Buffalo. (*d*) Dr. John Cronyn, Establishment of Medical Department of Niagara University. (*e*) General discussion and closing business.

THE Microscopical Club of the Buffalo Society of Natural Sciences, Dr. Frank J. Thornbury, president, announces the following program for 1896: January 13th—Geo. W. Rafter, M. Am. Soc. C. E., Rochester, N. Y., Lake Erie as a water supply for the towns on its borders; Herbert U. Williams, M. D., The parasite of malaria.

February 10th—Chauncey Pelton Smith, M. D., The protizoa, their etiological relation to cancer, demonstration; Miss Edna Porter, Some common fungi. March 9th—Prof. F. G. Novy, Ann Arbor University, Michigan, subject to be announced. April 13th—Franklin W. Barrows, B. S., M. D., A microscopical study of nerve cells in hunger and fatigue, embryological exhibit; Fred. C. Bush, B. S., Cutting and imbedding—most improved methods, notes on the use of formalin. May 11th—Annual meeting; report of the secretaries and treasurer; president's address; election of officers.

Meetings will be held in the Buffalo Library and Art Building, natural science lecture room, on the second Monday in each month and will be called to order at 8.15 P. M.

THE St. Louis Academy of Medical and Surgical Sciences was organised November 6, 1895. The membership is limited to fifty. The following officers were elected for the ensuing year: President, Dr. Geo. W. Calc, Jr.; senior vice-president, Dr. James Moores Ball; junior vice-president, Dr. Arthur E. Mink; secretary, Dr. Emory Lanphear; treasurer, Dr. Wellington Adams; orator, Dr. Thomas O. Summers; curator, Dr. George Howard Thompson.

THE Medical Society of the State of New York will hold its ninetieth annual meeting at Albany, on Tuesday, Wednesday and Thursday, January 28, 29 and 30, 1896, under the presidency of Dr. Roswell Park, of Buffalo. The delegates and members should take cognisance of the fact that the meeting this year is to be held a week earlier than usual, the object of which is to secure better hotel accommodations than can be had during the first week in February.

THE Western Association of Obstetricians and Gynecologists held its fifth annual meeting at Kansas City, Mo., December 27 and 28, 1895, under the presidency of Dr. J. E. Summers, Jr., Omaha, Neb.

THE American Microscopical Society will hold its nineteenth annual meeting in the new Carnegie Library Building, Pittsburg, Pa., Tuesday, Wednesday, Thursday and Friday, August 18, 19, 20 and 21, 1896. A hearty welcome will be extended to all interested in the microscopical sciences. Applications for membership

and titles of papers to be read at the meeting should be addressed to A. Clifford Mercer, M. D., president, Syracuse, N. Y., or to Wm. C. Krauss, M. D., secretary, 382 Virginia street, Buffalo, N. Y.

Book Reviews.

CUTANEOUS MEDICINE. A Systematic Treatise on the Diseases of the Skin. By LOUIS A. DUHRING, M. D., Professor of Diseases of the Skin in the University of Pennsylvania, etc. Octavo, pp. vii.—221. Illustrated. Philadelphia: J. B. Lippincott Company. 1895.

Dr. Duhring's reputation and the standard character of his treatise on diseases of the skin renders the announcement of his latest work on cutaneous medicine of more than ordinary interest. Part I. of this work is now before us and comes up fully to our expectations. The author is nothing if not practical, and possesses in a high degree the art of bringing out the principles and practical bearing of the relations of the subject in question.

The sections on anatomy and physiology, which come first, and the understanding of which are so necessary to the successful diagnosis and treatment, are presented in a style which divests them of anything like dryness and makes them both satisfactory and instructive. The sections are illustrated by admirably executed drawings that embody the latest researches made in the morphological histology of cutaneous tissues.

It is pertinent to say that the important subject of the relationship of general diseases and conditions to the local skin affections is discussed at length, and in a manner which appeals to the general practitioner, to whom it is so important, as well as to the specialist.

A feature which will be appreciated by the student is the clearness and conciseness of description. The author has avoided those minute unnecessary points which so often tend to obscure rather than to make clear the subject. A careful examination of the treatise convinces us that he has accomplished his task with painstaking fidelity, representing the most advanced scientific and clinical position of the art. E. W.

A SYSTEM OF SURGERY. In a Series of Contributions by twenty-five English Authors. Edited by FREDERICK TREVES, F. R. C. S., Surgeon to, and Lecturer on, Surgery at the London Hospital; Examiner in Surgery at the University of Cambridge. In two large octavo volumes. Volume I., 1178 pages, 463 engravings and two colored plates. Cloth, $8.00. Philadelphia: Lea Brothers & Co., Publishers. 1895.

The aim of this work is to present in an authoritative and concise way the pathology, clinical manifestations and treatment of

the various surgical conditions with which the surgeon has to deal, and this is accomplished in a way which we cannot but think will prove most satisfactory both to the surgeon and student. No attempt is made to go into minute details of different operations, but the underlying principles of treatment in general are given fully and plainly. Ophthalmic surgery is entirely excluded from the work, it being regarded as too important and comprehensive to be confined within necessarily limited compass.

The various subjects are treated by acknowledged authorities in the same and include such familiar names as those of Watson Cheyne, Barker, Lane, Morris, Gould, Sutton, Bowlby and many others, thus insuring for each subject that it is written in a thorough and practical manner and contains the results of mature experience and judgment. The subjects treated include surgical bacteriology and pathology, minor surgery, injuries and diseases of the various tissues of the body, constitutional conditions with surgical sequelæ and other chapters upon important subjects.

One chapter upon the influence of constitutional conditions upon injuries, written by the editor, is excellent and should invite others to further investigation along these lines. This chapter is quite characteristic of the book as a whole in that it is so eminently practical. The illustrations are mostly original and many of them elucidate the text in a very satisfactory way. The publishers have given to the profession a book quite up to the high standard of excellence for which they have long been noted.

J. P.

A HAND-BOOK OF MEDICAL DIAGNOSIS. By JAMES B. HERRICK, M. D., Adjunct Professor of Medicine, Rush Medical College, Chicago. In one 12mo volume of 429 pages, with eighty engravings and two colored plates. Cloth, $2.50. Philadelphia: Lea Brothers & Co., Publishers. 1895.

Artfulness in diagnosis is an essential to therapeutic success, and it is well to have all the methods of the former discussed from various standpoints. Herrick is a new contestant for professional favor in this field, but he greets his audience with becoming modesty and presents his observations with a clearness and conciseness which demonstrate that he is a master of his subject.

His book is intended for students, hence is to be judged from a viewpoint altogether different from that of the larger and completer treatises that are written for more advanced readers. The author has aimed to group into compact form the principal facts that aid in diagnosis; that is, those to be derived from clinical observation, from chemistry, bacteriology and the microscope. He expresses a hope that the volume will be more than a quiz-compend and that it will stimulate to further study in larger works.

Taking Herrick's observations on diseases of the heart and pericardium as an example, we should say that he had reasonably

succeeded in his expectations and desires. He describes the physical examination of the heart in an admirable manner, without a superfluous sentence, and no student can fail to derive valuable information from its study.

We commend the work especially to undergraduates, but may add that the busy physician will find it an excellent prompter to his memory.

PHYSICAL AND NATURAL THERAPEUTICS. The Remedial Use of Heat, Electricity, Modifications of Atmospheric Pressure, Climates and Mineral Waters. By GEORGES HAYEM, M. D., Professor of Clinical Medicine in the Faculty of Medicine of Paris. Edited with the assent of the author, by Hobart Amory Hare, M. D., Professor of Therapeutics in the Jefferson Medical College of Philadelphia. In one handsome octavo volume of 414 pages, with 113 engravings. Cloth, $3.00. Philadelphia: Lea Brothers & Co., Publishers. 1895.

The above title gives a synopsis of the scope of this interesting work which, it will be observed, is different from the ordinary therapeutical treatise. It is devoted to the consideration of remedies outside of the materia medica in their applicability to the treatment of disease. Every physician understands that there are many remedies more potent than mere drugs. Fresh air, exercise, pure water, a light heart and a clear conscience are all good medicines.

This work, written by an able French therapeutist and edited by an equally distinguished American author in the same department of medicine, it cannot fail to find favor in the United States.

It is divided into six parts—namely, part I., atmospheric pressure as a therapeutic agent; part II., climate; part III., thermic agents; part IV., hydro-therapeutic measures; part V., mineral waters, and part VI., electricity.

The section on climate has been rewritten by the editor and now for the first time places the abundant resources of our own country, in this particular, at the intelligent command of the American profession. Medical electricity is very properly considered as the closing section, being of least consequence, although the space devoted to it is out of proportion to its relative importance.

This is the kind of a book that every physician, no matter what his specialty, needs to have at ready command for reference and consultation.

MODERN MATERIA MEDICA WITH THERAPEUTIC NOTES. For the use of Practitioners and Students of Medicine. By Dr. OTTO ROTH. Seventh edition. Revised by Dr. Gregor Smith, Würzburg. One volume of 467 pages, octavo, muslin binding. Price, $2.00. New York: William Wood & Co. 1895.

This book was translated some years ago for Wood's medical and surgical monographs. It was soon afterward reprinted in book

form and a translation of the seventh edition is now offered to the profession. The arrangement of its contents is as follows: I. The various remedial agents grouped according to their physiological and therapeutic action. II. Drugs and other remedies, alphabetically arranged, with remarks on their physiological action, therapeutic use and dosage. III. Remedies most commonly used for subcutaneous injection. IV. The most commonly employed remedies for inhalation. V. Therapeutic notes. VI. Table of maximum doses for an adult. VII. Dosage for children of various drugs. VIII. Therapeutic index.

The grouping of the subjects in this book is excellent, many of the prescriptions published are useful and altogether it is a book that will prove of great service to the practiser of general medicine.

TEXT-BOOK OF PHYSIOLOGY. By MICHAEL FOSTER, M. D., F. R. S., Prelector in Physiology and Fellow of Trinity College, Cambridge, Eng. New (sixth) American edition with notes and additions. In one octavo volume of 922 pages, with 257 illustrations. Cloth, $4.50; leather, $5.50. Philadelphia: Lea Brothers & Co., Publishers. 1895.

This new sixth edition of this work will be most welcome to every teacher and student of physiology. The author enjoys the distinction of being the leading English physiologist, hence his book is the leading text-book in use by English-speaking students abroad. In this edition it is asserted that every page has been subjected to careful scrutiny, useless verbiage omitted, obscure sentences revised or rewritten, typographical errors corrected, histological details abridged, theoretical parts expunged and many alterations and additions made, bringing the book forward to the present time. It is adapted to the use of junior as well as advanced students and it is one of the best single volume treatises for the practiser of general medicine. Many of the illustrations have been reëngraved, while the general style and price of the book remain as before. Foster is especially interesting in dealing with the special senses, but we think the space he devotes to the physiology of reproduction is rather too scanty, considering the importance of the subject. In an appendix, however, he treats fully the chemical basis of the animal body, which is an exceedingly interesting section.

TRANSACTIONS OF THE ASSOCIATION OF AMERICAN PHYSICIANS. Tenth session, held at Washington, D. C., May 30 and 31, 1895. Philadelphia: Wm. J. Dornan, Printer. 1895.

This volume of the transactions of this eminent society is an interesting record of its work during its last annual meeting. The papers read cover a wide range of subjects, and many of them

were ably discussed. A paper, entitled Two cases of fat necrosis, by Drs. Charles G. Stockton and Herbert U. Williams, of Buffalo, possesses much interest and is well illustrated. Another paper that invites the study of the curious, and is also not without its practical side, is that by Dr. Charles Cary, of Buffalo, on The cause of the disparity found, both in health and disease, on physical examination of the upper portion of the chest. This paper contains two beautiful illustrations, showing casts of the bronchial tubes of the right and left lungs.

The volume is uniform in style and type with those that have preceded it.

A TEXT-BOOK OF PRACTICAL MEDICINE. Designed for the use of Students and Practitioners of Medicine. By ALFRED L. LOOMIS, M. D., LL. D., Professor of Pathology and Practical Medicine in the Medical Department of the University of the City of New York; Visiting Physician to Bellevue Hospital, etc. Revised and enlarged, with 207 illustrations and one chromo-lithographic plate. Eleventh edition, 1134 pages. Price, cloth, $6.00; leather, $7. New York: William Wood & Co. 1895.

The first edition of this treatise appeared in 1884, since which time ten others have been put forth—an average of one edition a year. This is evidence of the popularity of the work. Dr. Loomis was engaged in the revision of the eleventh edition at the time of his fatal illness and had nearly completed it. Since his death only such alterations and additions have been made as seemed necessary.

Dr. Loomis was a teacher of forceful and persuasive powers, and he has carried his personality into this work, which has steadily maintained its hold as a text-book in the schools in spite of the active competition of many other worthy treatises. To those who have possessed the earlier editions, this revision will become almost a necessity, while those who are strangers to the work will find it full of interest and teeming with practical teachings.

BOOKS RECEIVED.

Injuries and Diseases of the Genital and Urinary Organs. By Henry Morris, M. A., M. B., Lond., F. R. C. S., Surgeon to, and Lecturer on, Surgery at the Middlesex Hospital; Member of the Council and of the Court of Examiners of the Royal College of Surgeons, England, etc. Small 8vo, pp. xvi.—478. With ninety-seven illustrations. New York: William Wood & Co. 1895.

Outlines of Materia Medica and Pharmacology. A Text-book for Students. By H. M. Bracken, M. D., Professor of Materia Medica, Therapeutics and Clinical Medicine, University of Minnesota. Octavo, pp. 383. Price, $2.75. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1895.

Hand-Book for Hospitals. By Abby Howland Woolsey, Member of the Committee on Hospitals, State Charities Aid Association. No. 32 New York State Charities Aid Association Series. Third edition. Price, $1.00. G. P. Putnam's Sons, New York, 27 West Twenty-third street. 1895.

Transactions of the Texas State Medical Association. Twenty-seventh annual session, held at Dallas, Texas, April 23, 24, 25, 26, 1895. H. A. West, M. D., secretary, Galveston, Texas. Knapp Bros., Printers and Publishers. 1895.

A System of Surgery. By American Authors. Edited by Frederic S. Dennis, M. D., Professor of the Principles and Practice of Surgery, Bellevue Hospital Medical College, New York; President of the American Surgical Association, etc.; assisted by John S. Billings, M. D., LL. D., D. C. L., Deputy Surgeon-General, U. S. A. To be completed in four imperial octavo volumes, containing about 900 pages each, with index. Profusely illustrated with figures in colors and in black. Volume III., 908 pages, 207 engravings and ten colored plates. Price, per volume, $6 in cloth; $7 in leather; $8.50 in half morocco, gilt back and top. For sale by subscription. Full circular free to any address on application to the publishers, Lea Brothers & Co., Philadelphia.

Surgery. A Practical Treatise, with Special Reference to Treatment. By C. W. Mansell Moullin, M. A., M. D., Oxon.; Fellow of the Royal College of Surgeons; Surgeon and Lecturer on Physiology to the London Hospital, etc., assisted by various writers on special subjects. With 623 illustrations. Royal 8vo, pp. 1250. Third American edition, revised and edited by John B. Hamilton, M. D., LL. D., Professor of the Principles of Surgery and Clinical Surgery, Rush Medical College, Chicago; Professor of Surgery, Chicago Polyclinic; Surgeon, formerly Supervising Surgeon-General, U. S. Marine Hospital Service, etc., etc. Price, $6.00, Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1895.

An Atlas of Ophthalmoscopy. With an Introduction to the Use of the Ophthalmoscope. By Dr. O. Haab, Professor of Ophthalmology, University of Zurich. Translated and edited by Ernest Clark, M. D., B. S. (Lond.); Fellow of the Royal College of Surgeons; Surgeon to the Central London Ophthalmic Hospital, etc. Duodecimo, profusely illustrated. New York: William Wood & Company. 1895.

A Guide to the Practical Examination of Urine, for the Use of Physicians and Students. By James Tyson, M. D., Professor of Clinical Medicine in the University of Pennsylvania, and Physician to the Hospital of the University, etc. Duodecimo, pp. xii.—276. Ninth edition, revised and corrected. With a colored plate and wood engravings. Price, $1.25. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1895.

A Hand-Book of Obstetric Nursing. For Nurses, Students and Mothers. Comprising the course of instruction in obstetric nursing given to the pupils of the Training School for Nurses connected with the Woman's Hospital of Philadelphia. By Anna M. Fullerton, M. D., Physician in charge of, and Obstetrician, Gynecologist and Surgeon to the Woman's Hospital of Philadelphia, etc. Fourth, revised edition. Illustrated. Price, $1.00. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1895.

Spectacles and Eyeglasses. Their Forms, Mounting and Proper Adjustment. By R. J. Phillips, M. D., Adjunct Professor of Diseases of the Eye, Philadelphia Polyclinic and College for Graduates in Medicine; Ophthalmic Surgeon to the Presbyterian Hospital in Philadelphia, etc. Second edition, revised, with forty-nine illustrations. Price, $1.00. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1895.

Obstetrical Pocket Phantom. By Dr. K. Shibata, Specialist in Gynecology and Obstetrics, Tokio, Japan; Physician to the Woman's Clinic at the University of Munich. Preface by Prof. Franz von Winckel. With eight illustrations, one pelvis and two-jointed manikins. Translated from the third edition by Ada Howard-Andenried, M. D., Physician to the Children's Clinic at the Woman's Hospital, Philadelphia. Price, $1.00. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1895.

Proceedings of the Orleans Parish Medical Society for 1894. Augustus McShane, M. D., Secretary. Volume II. New Orleans: L. Graham & Son, Printers. 1895.

The Johns Hopkins Hospital Reports. Volume IV., number 9. Report in Pathology, IV. Contents, Deciduoma Malignum. By J. Whitridge Williams, M. D. Baltimore: The Johns Hopkins Press. 1895.

A Manual of the Practice of Medicine. By George Roe Lockwood, M. D., Professor of Practice in the Woman's Medical College of the New York Infirmary; Attending Physician to the Colored Hospital and to the City (late Charity) Hospital, etc., etc. Small 8vo, pp. 935. With seventy-five illustrations in the text and twenty-two full-page colored plates. Price, $2.50. Philadelphia: W. B. Saunders, 925 Walnut street. 1895.

Principles of Surgery. By N. Senn, M. D., Ph. D., LL. D., Professor of Practice of Surgery and Clinical Surgery in Rush Medical College, Chicago; Professor of Surgery in the Chicago Polyclinic; Attending Surgeon to the Presbyterian Hospital; Surgeon-in-Chief to St. Joseph's Hospital; Ex-President American Surgical Association, etc., etc. Second edition, thoroughly revised. Illustrated with 178 wood-engravings and five colored plates. Royal octavo, pp. xvi.—656. Extra cloth, $4.50 net; sheep or half-Russia, $5.50 net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry street.

Literary Notes.

E. B. TREAT, Publisher, New York, has in press for early publication the 1896 *International Medical Annual*, being the fourteenth yearly issue of this handy and useful work. Since the first issue of this one volume reference work, each year has witnessed marked improvements; and the prospectus of the forthcoming volume gives promise that it will surpass any of its predecessors. It will be the conjoint authorship of forty prominent specialists,

selected from among the eminent physicians and surgeons of America, England and the Continent. It will contain reports of the progress of medical science at home and abroad, together with a large number of original articles and reviews on subjects with which the several authors are especially associated. In short, the design of the book is, while not neglecting the specialist, to bring the general practitioner into direct communication with those who are advancing the science of medicine, so he may be furnished with all that is worthy of preservation, as reliable aids in his daily work. Illustrations in black and colors will be used wherever helpful in elucidating the text. Altogether it makes a most useful, if not absolutely indispensable, investment for the physician. The price will remain the same as previous issues, $2.75.

KEIL'S MEDICAL PHARMACEUTICAL AND DENTAL DIRECTORY.—George Keil, editor, Philadelphia, announces the early publication (fourth edition) of Keil's Medical, Pharmaceutical and Dental Register-Directory and Intelligencer, for Pennsylvania, New York, New Jersey, Maryland, Delaware and District of Columbia. Its list of national colleges, state hospitals, homes, dispensaries, societies, and post-office addresses of physicians, druggists and dentists, school of graduation and year, all the latest laws in these states, will be complete to date of issue as a personal canvass will be made for data. The names in large cities, in addition to being in alphabetical order, will be numerically arranged by streets, also an alphabetical list of names of the whole directory, giving the page of each, features that will no doubt be appreciated.

THE *American Medical Review*, edited by Dr. Daniel Lewis, president of the New York state board of health, and published by the R. N. Plummer Company, 106–108 Fulton street, New York, has issued its first number bearing date January, 1896. It is a beautiful specimen of magazine printing and its contents bear the stamp of experienced editorial management. It is occupying a unique field in medical literature similar to that of the *Review of Reviews*, in its relation to general literature. If this medical review of reviews keeps itself within its original limitations, it is certain to meet with the favor of the medical profession.

WHAT is generally conceded in Philadelphia to be one of the most desirable building sites in the city has lately been purchased by

The Ladies' Home Journal. The property is located at Sixth and Walnut streets, which means that it fronts on two of the most beautiful squares in Philadelphia, the famous Independence Square on the east and Washington Square on the south. The land acquired includes five properties. On May 1, 1896, the houses thereon will be torn down to make room for a building costing $250,000, to be solely owned and exclusively occupied by the *Journal.* The building will require two years in its construction.

THE *Quarterly Medical Journal* for Yorkshire and adjoining counties has lately come to our table as an exchange. It is edited for the promoters by Mr. Simeon Snell, who has an able corps of assistants and associates. It is published at Sheffield, Eng., by Pawson and Brailsford. It is a handsome magazine, ably edited and well printed. We are glad to welcome it to our exchange table.

BULLETIN No. 8 of the Harvard Medical Alumni Association contains a report of the fifth annual meeting, held at Boston, June 25, 1895. At the annual dinner, speeches were made by the president, Dr. George B. Shattuck, President Elliott, Dr. Roswell Park, of Buffalo, and others.

THE *American Journal of Surgery and Gynecology* has been removed to St. Louis. Dr. Emory Lanphear, professor of surgery in the Woman's Medical College, has been appointed editor-in-chief.

THE *College and Clinical Record* will be hereafter known under the name of *Dunglison's College and Clinical Record:* a Monthly Journal of Practical Medicine.

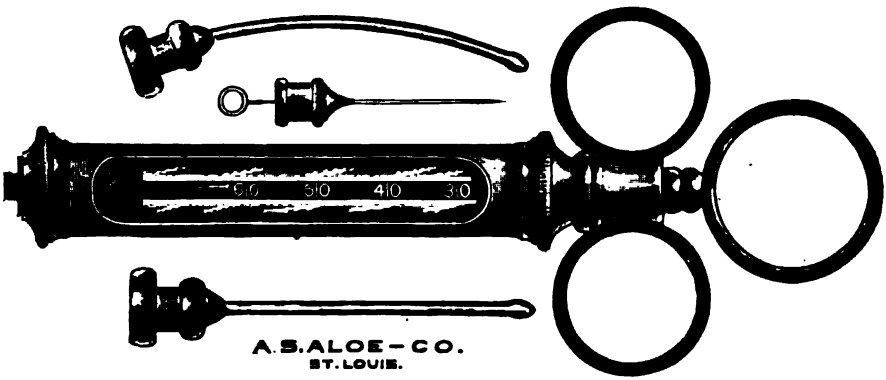
THE *Medical News*, for more than thirty years published in Philadelphia by Henry C. Lea and his successors, Lea Brothers & Company, announces that it will remove its editorial and publication offices to New York City with the beginning of the New Year.

Miscellany.

DR. C. L. SCHLEICH, of Berlin, has experimented with reference to topical anesthesia obtained by infiltration. Dr. Weller Van Hook,

of Chicago, has published clinical notes on the subject. Messrs. John Wyeth & Brother, manufacturing chemists, Philadelphia, have made tablets adapted to this method that tend to insure the accuracy of its application. The formulas used are those suggested by the authors above named, and the tablets can be obtained through druggists or of the manufacturers direct.

Dr. Bransford Lewis, of St. Louis, has devised an improved syringe for infiltration anesthesia, according to the method of Schleich. Dr. Lewis, in describing the instrument, an illustration of which we publish, says: That, no matter how easily or satisfactorily it may be employed in the superficial structures, where there are no large vessels in danger of being punctured with the hypodermic needle, when one is injecting in the depths of a



LEWIS: IMPROVED SYRINGE FOR INFILTRATION ANESTHESIA.

wound in the neighborhood of large arteries or veins, as in enucleating bubo-glands immediately above the femoral vessels, the likelihood of running the needle into one of them and producing disastrous results is not a fancied one.

By means of the needles represented in the cut, he has been enabled to do away with this difficulty. They are blunt-pointed, and made of German silver, so that, though of sufficient stiffness to be thrust into the connective tissues of a wound after the skin has been severed, they would not injure a blood-vessel if pushed against one.

The anesthesia is begun, therefore, with the sharp steel needle, and continued with either of the two silver ones. The choice

between the latter depends on whether a curved or straight needle is more conveniently used. This instrument is made by A. S. Aloe Co., of St. Louis, Mo. Armed with the tablets of Wyeth and the syringe of Lewis, the physician is prepared to practise the method of Schleich with safety and accuracy.

Six Hundred ($600) Dollars in Prizes.—The special attention of our readers is called to the advertisement of the Palisade Manufacturing Co., Yonkers, N. Y., with the above title, on second page of cover of this issue.

The prize contest which this well-known firm announces will no doubt attract attention, and result in the submission of many papers of merit on the clinical value of antiseptics, both internal and external. The prizes are extremely liberal, and the well-known professional and literary eminence of Dr. Frank P. Foster, editor of the *New York Medical Journal*, who has kindly consented to act as judge, is a sufficient guarantee of the impartiality to be observed in awarding the prizes.

Any physician in good standing in his profession is invited to compete on equal terms with every other competitor.

Further particulars as to conditions can be obtained by addressing the above-named firm.

In an action brought by Emil Schaefer, No. 241 Suydam street, Brooklyn, for $10,000 damages against Dr. Schelling, a physician connected with the Brooklyn board of health, whom Schaefer accused of compulsory vaccination, a jury before Judge Gaynor recently brought in a verdict of $1,500 for the plaintiff.

The Samuel D. Gross Prize.—The second quinquennial prize of $1,000 under the will of the late Samuel D. Gross, M. D., will be awarded January 1, 1900. The conditions annexed by the testator are that the prize "shall be awarded every five years to the writer of the best original essay, not exceeding 150 printed pages, octavo in length, illustrative of some subject in surgical pathology or surgical practice, founded upon original investigations, the candidates for the prize to be American citizens.

The essays, which must be written by a single author in the English language, should be sent to Dr. J. Ewing Mears, 1429 Walnut street, Philadelphia, before January 1, 1900.

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Original Communications.

TREATMENT OF COMPOUND FRACTURES.[1]

By EUGENE A. SMITH, M. D.,
Professor of general and descriptive anatomy, Niagara University, Buffalo, N. Y.

IT IS sometimes reproachfully said that modern surgery leans too far toward radicalism, and that the good results obtainable by antiseptic and aseptic methods foster this tendency. If this be so, it is no less true that there is some conservatism in modern surgery, and this is nowhere more strikingly shown than in the treatment of compound fractures. It is also true that antiseptic wound treatment originated and justified this conservatism. In the old days, conservative surgery in the treatment of compound fractures resulted so disastrously that the accepted rule of practice was amputation for compound fractures of the long bones of the extremities; and open treatment of the wound with drainage in all cases where amputation was impracticable. Contrasted with this radicalism of the old school of surgeons, mutilation by amputation is now the exception rather than the rule, and suppuration is less frequent, less prolonged and less often followed by fatal septicemia and pyemia.

To those who may be somewhat sceptical as to the truth of these generalisations, the following report of cases and observations based thereon may be of interest.

Compound fractures belong to the class of grave surgical conditions. They are the result of unusual violence and the various complications arising after simple fractures, such as shock, fat embolism, thrombosis, injury to vessels and nerves, osteomyelitis, necrosis, failure of union and intercurrent diseases are likely to occur more frequently and with more gravity. But the most dangerous factor in compound fractures is the element of septic infection. Sepsis jeopardises the welfare of the patient now in the

1. Read before the Buffalo Academy of Medicine.

same way that it did before the days of Lister and Pasteur. When infection once occurs these cases pursue a more or less prolonged course of suppuration and fever, ending in recovery only after a slow and precarious convalescence, or in progressive emaciation, deepening hectic fever, profound septicemia, pyemia and death. Old hospital reports show a mortality of from 50 to 75 per cent. after compound fractures, from septicemia and pyemia. One writer was able to report the unusual success of 48 per cent. of recoveries after conservative treatment of compound fractures. Bacteriological knowledge enables the modern surgeon to guard against the occurrence of infection in many cases and to cope more successfully with it when present. Recent statistics of 500 cases of traumatic compound fractures and designed osteotomies in hospital practice gave less than 1 per cent. of deaths from complications induced by septic infection. The statistics of traumatic cases alone are much less favorable, but far better than those already quoted of pre-antiseptic days.

Fractures are compound when in addition to the broken bone the soft parts are crushed, cut or torn, allowing communication between the site of the fracture and the air. Formerly the air was regarded as the source of infection. We no longer fear the entry of air as much as we do the contamination of the wound by contact with unclean objects. Contact infection is the main source of entry of pathogenic bacteria, notably the streptococci and staphylococci of pus.

Foreign bodies of the most diverse kinds, most diversely soiled and infected, may touch the wounded tissues after compound fracture, or be found in the wound itself. Shreds of cloth, particles of dirt, cinders, splinters of wood, bullets and substances designed to be hemostatic by well-meaning but surgically dirty friends, such as tobacco, cobwebs or rags, may lie openly in the wound or be hidden away in its nooks and crannies. Pyogenic bacteria, happily excluded in every other way, may be carried into the wound by the inverted, broken, unclean skin edges of the wound itself. Or, if by rare chance infection does not accidentally occur, the careless diagnostician, satisfying the vulgar curiosity of bystanders as well as his own, by inserting an unwashed finger or probe into the wound, deliberately jeopardises the patient's life, by planting germs in the most favorable soil for their development.

Autoinfection of a compound fracture not infected from without, or of a simple fracture with pus formation, and the produc-

tion of a compound fracture by its evacuation, is a rare occurrence, but possible. In 1890, a tugboat fireman was brought to Mynter's clinic, suffering from a simple fracture of the tibia in its upper third and scalds of the second degree of the arms, neck and head, the result of a boiler explosion. Suppuration of the scalded surface was free. The fracture did well for a time. High temperature and chills, with local inflammatory signs, called attention to the fracture about the seventh day, and thigh amputation became necessary after the tenth day to overcome the acute septicemia, developed from suppuration at the site of fracture.

It may now be said that the question of treatment of compound fractures hinges mainly on the prevention and elimination of infection. If we succeed in preventing infection of the injured parts, the lapse of a few days, or of ten days at the most, converts the compound fracture into a simple fracture, which is treated as such during bony regeneration. If infection occurs and we wash away or destroy the bacteria before they can penetrate the tissues, we again convert the compound fracture into a simple one; and lastly, if infection progresses beyond our reach, we must contend with the septicemia which supervenes. In all cases, therefore, it should be the rule of practice to convert a compound fracture into a simple one by excluding pathogenic bacteria from the wound or by removing and destroying them if they have gained entrance. Such treatment is exactly analogous to the aseptic and antiseptic treatment of incised wounds of the soft parts, and the result may be called healing of compound fracture by first intention.

Compound fracture occurs by direct violence when the force injures the soft parts and breaks the bone directly, as by the crush of a wagon wheel or the passage of a rifle ball. Indirectly, after force has broken a bone, a fragment, or the splintered end of the shaft may pierce the soft parts and skin. According to the degree of violence, the case may show moderate laceration of the skin with sharply cut edges, moderate contusion and tearing of the muscular and connective tissues, injury to small vessels and nerves, and one of the classical displacements of the bone ends, transverse, longitudinal, oblique or dentate; or the violence being more severe, the condition may pass from severe laceration and contusion of the soft parts with comminution of bone and grotesque deformity, to the complete and hopeless mangling usually produced by car wheels.

When a fracture is compounded by the bone end puncturing or

lacerating the soft tissues and skin, usually a fairly clean or absolutely clean wound results. Here the baneful effects of hasty action looking to diagnosis or treatment are most apparent. If hemorrhage is of serious nature a tourniquet should be applied until operative steps can be taken to tie the vessel. By no means should the external wound be packed with gauze or other material. If the blood-clot, which soon forms, is touched by a dirty finger, probe or dressing, it is rendered a focus of disease and a menace to the healing process which it otherwise would conserve, as Schede has so well shown. A blood-clot is nature's compress, and it is far safer to carry a patient miles with no other dressing than to infect this clot. In Thornbury's translation of Schimmelbusch's Aseptische Wundbehandlung, it is stated that in half an hour only sixty to seventy bacteria gravitate from the air upon a surface a square decimeter in extent from the germ-laden air of Von Bergman's crowded clinic room, while water from the Spree river carries 37,000 bacteria to the cubic centimeter, and if freely used as an irrigating fluid, unboiled, would bring 37,000,000 bacteria into contact with the wounded surfaces. The number of bacteria on pus-stained dressings, the finger or a probe may not equal this number, but the pathogenic pyogenic bacteria would be present in undue proportion rather than the nonpathogenic germs of putrefaction.

In these cases, then, reduce deformity and immobilise the injured parts for transportation if the patient must be carried some distance. Before doing this, cleanse the wound neighborhood with an antiseptic solution. A 50 per cent. solution of the fifteen volume peroxide of hydrogen is an excellent ready antiseptic. The wound itself should be irrigated superficially with this solution, avoiding disturbing the deeper clot. An aseptic occlusion compress can now be applied and the patient moved home or to such operating place as circumstances require. If the nature of the injury and the appearance of the parts preclude serious infection of the wound, a second more thorough local cleansing and irrigation may now be made without anesthesia. A permanent aseptic occlusion bandage is next applied, and outside this a plaster-of-Paris cast, Volkman's splint, or such dressing as is indicated to reduce deformity, immobilisation being secured. If the condition of the wound is at all in doubt, especially as regards its deeper pockets, anesthetise the patient, enlarge the opening if necessary, thoroughly flush and clear out foreign particles and fragments of bone if stripped from the periosteum and again close the wound

by catgut suture, leaving a few strands of catgut for drainage. The occlusion and fixation dressing may be applied as before. Bone fragments should be wired only when deformity cannot otherwise be reduced or immobilisation secured. When infected fractures require frequent change of dressing, wiring is also indicated.

I have noted twelve cases of compound fracture treated as just described. A few of the cases I am able to bring before you. Two of the number I brought before the section last January, one a compound fracture of the humerus and ulna opening into the elbow-joint, and the other a compound fracture of the proximal phalanx of the first finger opening into the metacarpo-phalangeal joint. In both, primary healing of the wound in the soft parts was followed by uninterrupted bony repair and good motion in the joint. Four of the number were compound fractures of the skull, and repair was secured without suppuration. One of these cases is worthy of special report:

CASE I.—James Highland, aged 28, entered the Emergency hospital July 9, 1895, after being struck over the left eye by an anchor, while launching a boat. On examination, the skin and occipito-frontalis were found crushed and lacerated and the frontal bone, just over the supercilliary ridge, was broken and depressed. Trephining, I removed the bone covering an area of nearly two square inches, exposing the dura mater and opening into the frontal sinus. Trimming the skin edges and opposing them with catgut sutures, and draining with catgut strands, no suppuration occurred, although a sero-sanguineous discharge continued for a week.

I might also report a case of simple fracture of the patella converted into a compound fracture by my opening the joint to wire the fragments. This case I also reported last January, and the healing was typical of what should occur in traumatic compound fractures when bacterial invasion is successfully prevented. Of the four remaining cases two were treated by aseptic occlusion. One case occurred in July, 1895, during my service at the Erie County hospital:

CASE II.—A young man, aged 18, was injured by a mowing machine, sustaining a compound fracture of the fibula, an inch above the ankle. Dr. William House, of the house staff, applied an aseptic occlusion dressing, after local cleansing, and the case made a good recovery.

The second case occurred May 29, 1888:

CASE III.—George H., aged 12, fell from a wagon, suffering a compound fracture of the right tibia and, probably, simple fracture of the

fibula, at the middle of the leg. The primary dressing lay one week and on removal the external wound was closed. The irrigation in this case was superficial, only entering the small external wound and no effort was made to find whether the fibular fracture was also compound. The sublimated irrigating fluid came away without dirt, simply discolored by blood. The deformity and history pointed to protrusion of the upper fragment of the tibia as the cause of the external wound.

The remaining four cases illustrate antiseptic occlusion; two are reported.

CASE IV.—Joseph L., aged 40, was kicked by a horse, May 24, 1895, resulting in compound fracture of the right tibia at the junction of the middle and lower third. He was treated by Dr. E. M. Dooley, on his reception at the Emergency hospital, and the wound thoroughly cleansed, irrigated and covered by an antiseptic dressing and a plaster cast. There was slight overriding of the upper fragment and I found him to have marked phosphaturia, union being delayed, but no suppuration developed. He was discharged June 28, 1895.

CASE V.—Leon J., aged 26, was also an Emergency hospital case. He is a motorman and on June 2, 1895, he was crushed between trolley cars while adjusting a trolley. On examination I found a compound fracture of the left femur at the junction of the upper and middle third, with laceration and contusion of muscle. Enlarging the skin wound, under ether, I removed pieces of pulpified muscle, bone fragments and clots, using afterward a solution of peroxide of hydrogen to irrigate the wound thoroughly, followed by a solution of corrosive sublimate 1-4000. I then closed the external wound with catgut suture, applied sublimated compresses and a plaster cast to the thigh, put the patient to bed and put the extremity in a Volkman splint with fourteen pounds extension. His temperature reached 101° F. on the third day and then became normal. His plaster cast was not removed for six weeks, but a window was cut in it, over the site of fracture, as oozing sero-sanguineous fluid in the first twenty-four hours was enough to stain through dressing and cast. While walking on the street on July 27th, eight weeks after the original injury, this patient slipped on a wet sidewalk and fell, refracturing the femur at the site of the callus, and was sent back to bed with a plaster-of-Paris dressing for three weeks, when firm, bony union was attained.

When asepsis and antisepsis fail and compound fractures become infected, the main feature is to contend with sepsis in the most effective way until granulation tissue can form and interpose a barrier to the absorption of toxic products by lymphatics and veins. A compound fracture of the humerus in the upper third, in May, 1890, at the Emergency, caused a temperature rang-

ing between 104 and 105 for a week, and it was debated whether amputation of the arm at the shoulder would not offer the patient the best chance for life. Thorough drainage triumphed, but he had lymphangitis, phlebitis and secondary abscesses in the axilla.

In these cases, the key to success is to provide adequate channels for the escape of the toxic products of suppuration. In all cases of compound fracture, when making the first examination under anesthesia, the wound should be digitally explored, with the view of making counter openings later if infection and suppuration make them necessary.

I have noted six infected cases of compound fracture, not counting such injuries of the metacarpals, metatarsals and phalanges. The majority were the result of railroad injury, and the effort was made to prevent septic infection unsuccessfully. In one case the humerus was broken, two were of ulna and radius, one of the tibia, one of the tibia and fibula, and one of the femur. Two deserve special report. In the compound fracture of the femur there was comminution in the lower third. The fragments were removed and the wound drained and packed with iodoform gauze, to check hemorrhage. Suppuration did not appear until ten days later, when gangrene of the leg was well advanced, necessitating amputation in the middle third of the thigh. On examination, thrombosis of the femoral and popliteal artery was found, the clot blocking the lumen of the vessel for five inches. The second case is of interest because spectators of the accident and the patient himself insist that a car wheel ran over the leg above the ankle. As a rule such injuries require amputation. The exception in this instance may be held to prove the rule. He sustained a compound comminuted fracture of the tibia in the lower third, with moderate injury to the soft parts. Dr. E. M. Dooley called me to see the patient five days after the accident and we removed a large fragment of the tibia and made thorough drainage. The result was a useful leg, and the man is now a brakeman on the railroad.

Compound fractures due to gunshot injury are usually considered as a class by themselves. I have had no experience with such injuries, but it seems to me that they should be amenable to treatment according to the principles laid down. Recent investigations go to show that bullet tracks are usually clean, and the modern rifle ball has so high a velocity that perforation and not crushing or splintering will result when it strikes a bone. It is beyond question true that aseptic handling and sterilised dressings for

gunshot wounds are giving incomparably better results than the old methods of probing and removing the missile.

It may be argued that compound fractures of the skull should also be considered as a class, *sui generis*. True, the healing process is less complicated and much shorter, as bony repair does not involve the repair of a broken shaft as in the long bones. But, while conservative surgery may classify compound fractures according to the difficulty of successful treatment, as I have done in this paper, it must not differentiate compound fractures of the skull and of the long bones. A compound fracture of the skull, due to the blow of a bludgeon, is to be treated on the same principles as a compound fracture of the humerus, due to a crush between car bumpers. It is fortunate that the skull fracture will heal as kindly as it does, when antiseptically treated, for the sequelæ of septic infection of skull injury are more apt to be fatal than the sequelæ of septic infection in the broken arm.

When the surgeon comes to regard an osteotomy, of the tibia for instance, as analogous to a compound fracture of the same bone caused by the kick of a horse, differing only in the force exerted and the method of its application, he will surely know that the osteotomy is less likely to suppurate, because asepsis and antisepsis have been observed, and he will be prepared to treat all compound fractures that offer any hope to conservative work on the principle of converting them into simple fractures. We cannot as yet examine a wound with the eye of an oil immersion lens in the effort to search out and destroy pathogenic bacteria. When we can do so, the present statistics after treatment of compound fractures can be as much improved as we have improved on the work of the old surgeons, whose principles of treatment are laid down in the gloomy pages of the chapter on prognosis and treatment of compound fracture in the edition of 1880 of Billroth's Surgical Pathology.

771 ELLICOTT STREET.

THE stringency of the vaccination laws is in England the subject of noisy agitation on the part of ignorant demagogues (*British Medical Journal*); but what would some persons say to the interference with the rights of the individual which is maintained in Norway and Sweden? In these countries so impressed is the legislature not only with the advantages, but with the public duty of vaccination, that before a couple can be legally married certificates must be produced showing that both the bride and bridegroom have been satisfactorily vaccinated.—*Coll. and Clin. Record.*

APPENDICITIS.

Illustrative Cases with Histories of their Course.—Results of Medical and Surgical Treatment Compared.

By S. W. S TOMS, Ph. G., M. D., Bellport, L. I., N. Y.
Fellow of the New York Academy of Medicine.

THE following cases are reported because of the lessons they convey in connection with this most interesting disease as to the course they pursued both before and after treatment, together with the relation of the conditions we may reasonably expect resulting from acute attacks, primary or recurrent.

Especially are they of interest just now, because of the general acceptance of sound surgical principles in their management, when the reports of so many series of cases of successful operations *during the intervals of attacks* by eminent American surgeons in various parts of the country which have appeared in current medical literature within a year from such men as Senn, McGuire, Murphy and others.

Three years ago there were good men in all parts of the United States who contended against the prompt operative treatment in acute attacks, and it has been stated the treatment of appendicitis has given rise to more controversy[1] in medical annals than any other disease known. Happily, it has passed the transition stage and many opponents of operation, and many others who were "on the fence" have accepted the logic of experience and now renounce the old medical fad of ultra-conservatism for just and good reasons—no doubt of a personal nature. Time, too, coupled with the widespread reports of the public press, has had its effect on the lay mind, and patients or their friends rarely now cling to the hope of trusting to Nature, but prefer to take the chances of recovery by operation. Furthermore, it is clearly evident, cases that have providentially passed through an acute attack readily accept the proposition to have an operation before another one occurs, preferring the slighter risk to that of the greater with all its attending and lingering incomplete convalescence.

My cases are not reported in chronological order, but they all occurred during my first year's practice in a rather small community.

Case I.—*Peritonitis, (?) so-called. No operation. Treatment by opiates. Death.*—February 21, 1893, I saw J. T. O'C., a bright, intelligent lad, aged 6 years, of a good family and personal history; had been

ailing for two days previous with cramps, at intervals, which were increasing in severity. The night before he frequently awakened and cried out with pain. I learned that previous to the onset he had ingested a quantity of dried sweet corn, and had received a fall against a platform, striking his abdomen. He did not complain much at the time, but some ten hours afterward he was seized with abdominal pain. A dose of a patent medicine containing principally aloes was administered by the mother, as his bowels had been constipated. The bowels moved slightly in half an hour, probably not from the action of the medicine. He vomited several times before the movement and the cramps disturbed him frequently. These symptoms continued for two days, when I found the abdomen flat, fairly relaxed, excepting when in pain; at those times he would flex his thighs on the abdomen and curl himself up, crying out from the pain. His bowels had not moved. (I was not told of the circumstance of the fall, or that he had eaten the dried corn until some days after). The pain he located in the epigastrium. There was no tenderness complained of upon palpation and no tumor existed in any region that could be made out. Deep pressure in the right iliac region was slightly painful, although the same was complained of when made in the opposite side. Pulse, 90; temperature, 100° F. He had been unable to retain scarcely any nourishment since he was first taken. His tongue was coated with a whitish fur and was dry; skin dry and countenance at times anxious. Small and frequent doses of calomel were given at intervals during the night and a dose of oil in the morning; this latter was rejected. The child passed a better night than the preceding one. In the morning I gave a high-up enema of Epsom salts, turpentine, glycerine and soapsuds, through a soft rubber rectal tube in the genu-pectoral posture; only a few hard, dark-colored scybala passed, mixed with corn shells, also a little blood-stained mucus. I gave small doses of antispasmodics, combined with minute doses of morphia, and at night 30 c.c. of castor oil in egg emulsion. He had small quantities of milk and lime-water, most of which was retained.

The oil increased the cramps and vomiting soon became troublesome again. I was at this time informed of the injury and about the dried corn eaten three days before. On the following morning, finding the patient with a tense abdomen and constantly flexed legs, I requested counsel. Peritonitis was the diagnosis made and the plan of treatment suggested was opiates, liquid nourishment and stimulation. The urine was abundant, of the "beery" appearance; the temperature ranged about the same with some acceleration of pulse and respirations. The following day patient's abdomen was tympanitic and his condition still more unfavorable. A second consultation with another practitioner was requested by the family. The diagnosis and treatment were concurred in and Tully's powder given to maintain the respirations at about seven to ten per minute. Hot stupes were also applied to the abdomen.

On the fifth day he was taking 0.01 of morphia every hour. The pulse continued to rise to 140 and became weaker and more irregular, but the temperature fell to about 99.5°. Marked icterus developed on the sixth day and he required to be catheterised for forty-eight hours before death. Death occurred on the ninth day and was due to unmistakable general septic peritonitis, undoubtedly from rupture of abscess or perforation of the vermiform appendix. No autopsy was permitted.

From the history as above related it might be inferred by many who have this only for a guide that this case might have been one of intestinal obstruction, or volvulus. However, the course of symptoms indicated septic peritonitis, which was rapid after undoubted peritoneal infection.

CASE II.—*Gangrenous appendicitis with perforation. Septic peritonitis. Operation. Death.*—At midnight, June 20, 1893, I saw C. P. P., aged 50, American, capitalist, married, who was suffering from cramps. He had lost one brother after an operation for appendicitis. Patient always had good health, excepting a weak stomach; although a high liver, he was not a drinking man. From adolescence he had had frequent attacks of "cramps" within the abdomen. In the mornings he frequently suffered from nausea and vomiting.

Two days previous to the above date he fell violently to the ground, while playing tennis, inflicting a slight sprain in one ankle; but the fall apparently greatly prostrated him and he suffered from shock for several hours after, the symptoms being out of all proportion to the accident. He vomited and was unable to eat any supper. He was taken with violent abdominal pain, paroxysmal in character, the next evening, twenty-four hours before I saw him. He informed me he was attended by a physician, who administered morphia hypodermatically and the skin was reddened by the effects of a large sinapism applied to the whole abdomen.

He was around town attending to business the day following the fall and preceding the attack, and felt no inconvenience, except for the painful and tender ankle. In the evening he returned to his summer cottage here and I was called at midnight as stated. He was apparently suffering acutely with diffused abdominal pain; deep pressure over the right inguinal region elicited great tenderness. I diagnosticated a probable appendicitis, administered an anodyne and left him for the night. There was slight elevation of temperature; pulse, 90; bowels constipated.

I was called again about six A. M., as he was again having pain. I gave an enema, bringing away hard masses of scybala. Administered .50 of calomel to be followed in two hours by a teaspoonful of sulphate of magnesia every half hour in concentration, until free evacuations were induced. Three movements were produced before one o'clock.

Although the paroxysms were mitigated the vomiting persisted at intervals. Morphia was given hypodermatically to allay this annoying symptom, as nothing whatever partaken of was retained. During the afternoon two more movements of the bowels followed, which consisted of clear, uncolored mucus, perfectly free from fecal matter. The abdomen was tenser and the right side hard and tender. No tumor could be made out. Patient had several rigors; pulse, 110; temperature, 96° F. Rectal examination by finger elicited pain on the right side. His family physician, Dr. Francis W. Murray, of New York, was wired to come at once, prepared to operate for appendicitis. At that time some abdominal distension was perceptible. All nourishment was rejected by the stomach during the day, the pulse became more rapid and thready, and the countenance more anxious. Morphia was given by needle to put the patient at ease and restrain peristalsis. Ice was kept applied to the abdomen. Drs. McBurney and Murray arrived in the evening. After consultation the patient was etherised at eleven o'clock. The operation lasted about forty minutes, the incision made in the usual way. When the peritoneum was incised, pus and serum spurted upward several inches. Pus was free in the abdominal cavity. The appendix was in a state of gangrene with three perforations. No limiting adhesions were found and the most intense peritonitis with paralysis of the bowels, allowing of great distension, pervaded the entire abdominal contents. The abdomen was thoroughly cleaned out from all septic fluid as was possible and large quantities of hot normal saline solution were poured in among the intestines, which were freed from lymph and washed thoroughly, drainage provided and the wound allowed to remain open.

The patient stood the operation well and recovered consciousness within an hour after being placed in bed. He died of general septic peritonitis fifty-two hours after operation, despite all efforts to overcome intestinal paralysis.

This case was one of those that appear, from the results of so rapid gangrene, fatal from the onset; although, had he been operated on within a few hours of the first attack of colic, peritonitis, possibly, might have been averted and a chance of recovery possible.

CASE III.—*Appendicitis. Recovery (?) without operation. Recurrent symptoms following.*—August 9, 1893, J. B. S., aged 39, single, hotel proprietor, American; family history good and with no history of specific disease He was suddenly attacked with intestinal cramps located mostly in the right side, which was especially sensitive to palpation. Percussion elicited hyperresonance, although by deep pressure a well-defined tumor could be felt in the cecal region and the entire colon distended with feces could be distinctly mapped out. Constipa-

tion had existed for several days, with irregularity and unsatisfactory evacuations for some time previous. Patient said he never had suffered from a similar attack. His tongue was coated and dry; temperature, 101° F.; pulse, 100; abdomen, soft; pain was quite sharp and vomiting occurred. A full dose of calomel, followed by salines, failed to move the bowels until a high-up enema of glycerine, salts solution and turpentine brought away large quantities of hard fecal matter; free purgation followed. As the symptoms ameliorated, the patient was kept in bed upon liquid diet and morphia administered. All signs of the acute stage passed off, excepting extreme tenderness in the right iliac region, which remained for over a month. Nine months after he informed me pain or an uneasy feeling follows exertion. For this reason recovery is certainly incomplete.

CASE IV.—*Appendicitis. Recovery (?) without operation. Spontaneous evacuation of abscess per rectum.*—February 8, 1894, W. S., aged 34, German; peddler; married. Family history indifferent. Previous illness: an attack of rheumatism five years ago; other than that has always been healthy. On above date patient was exposed to a severe chilling. Early the next morning he was taken with severe cramps. Was not constipated up to onset of attack, but obstinately so after its inception. Vomiting supervened, when one attack was soon followed by another paroxysm. The pain was referred to the abdomen, generally, but more especially to the right inguinal region. A tumor was palpable, the size of a fetal head at the sixth month; hard and tender, giving a dull percussion note. Only moderate rigidity of the abdominal muscles on the right side existed. The man lay with his legs flexed. The skin was hot and dry. Temperature, 101° F.; pulse, 120. One gramme of calomel was given, followed in three hours by 5.0 of sulphate of magnesia in concentration every hour for several doses, to be assisted after the fourth dose, if necessary, by a high-up enema in the knee-chest position, of the composition given in the other cases. Three such injections of about half an hour intervals were given before an evacuation was effected, when a large amount of scybala was expelled. A fourth injection was given when soft fecal matter followed. A short interval elapsed when desire to go to stool again came on. At this movement about a teacupful of bloody pus was evacuated. Following this several watery passages occurred during the day and succeeding night. After this all symptoms subsided and convalescence was uninterrupted. This was a primary attack. A year after, this man informed me he was not well. His bowels are irregular, his side is weak and tender, he is unable to do hard work because of the fear of bringing on another attack and he is constantly troubled with hemorrhoids.

CASE V.—*Appendicitis. Recovery (?) without operation.*—December 7, 1893, C. C., aged 36, American; carpenter; married. Excellent

family and personal history. Patient says he has never had any illness excepting two or three attacks of "inflammation of the bowels"; and, when a youth, had a number of attacks of "wind colic" and diarrhea. He constantly suffers from constipation and such was his condition for several days before I was called to attend him at day-break one morning, for an attack of cramps, which had set in the night before after supper. An hour or two after the onset of pain he vomited, which recurred several times during the night. Domestic remedies and hot applications to abdomen failed to afford relief. When I saw him he was suffering great agony, was much concerned and depressed by the sudden seizure; there was some shock, temperature was subnormal, pulse small and rapid. I administered a simple gastric sedative, containing a small amount of morphia, and directed he should have the powder (containing 1 gm. calomel) when he became somewhat more tranquil. The calomel was to the followed by salines, as is my custom, until free catharsis ensued. I saw him again in six hours and found he had not had an evacuation. He had become easier, the vomiting had ceased and he retained all the medicines. I gave a high-up enema which was very successful soon afterward; free evacuations followed. These measures relieved as they had in the previous cases and the patient reacted quickly. In this case no tumor was present, the abdomen was flat and very tense and tender, pain was diffuse, but the point of maximum tenderness was over cecum and McBurney's point. He stated he afterward had "crampy" suggestions in his right side for weeks; and six months, subsequently, I found him wearing a porous plaster over the old seat of trouble as a prevention of recurrence—a very suggestive sign even to him that he had *not recovered.*

CASE VI.—*Perforative appendicitis and diffused peritonitis. Operation. Recovery. With comments.*—A. D. H., aged 24, single, American; student, with a family history of intestinal disorders, was taken ill with cramps and vomiting on the night of July 2, 1893. I was informed by the patient that he had a maternal uncle die of appendicitis, also a brother, aged 7, of the same disease following an operation. A sister, aged 11, then living, had several attacks in a mild form.[1] His father and mother are living and well—the latter was at this time convalescing from an operation for tumor of the breast. At the bedside I learned that this present attack was a recurrence of many previous similar ones, but more violent in its onset. Apparently it had been precipitated by the ingestion of some articles of food taken the previous evening for dinner which invariably disagreed with him, and which enjoined upon him great care in the regulation of his diet. There

1. NOTE.—Since the above was written this sister has died of "anorexia nervosa." The autopsy revealed a perfectly healthy appendix—despite the fact several attacks from which she suffered were diagnosticated appendicitis. She would have been operated upon but for the conservatism of the family physician, although he did not dissent from the diagnosis.

existed a previous history of constipation preceding this attack—of irregularity of the bowels and unsatisfactory movements. The patient was not robust in appearance and had a dull complexion, a loaded skin. Eight years previous, while in the south of France, he had an attack of "inflammation of the bowels" which confined him to his bed for three weeks and from which he made a slow and tedious convalescence. He was treated by opiates and poultices. That was the last and most severe attack previous to the present one. He informed me he was suddenly awakened about midnight with severe cramps in his abdomen, shortly followed by vomiting. These symptoms were paroxysmal and persistent throughout the night. The pain, although diffuse, was mostly referred to the region of the umbilicus. I saw him about 9.30 A. M. (July 3d), and found him suffering profoundly from shock, with an anxious countenance, a pinched face and blanched lips. A cold, clammy perspiration exuded from the extremities; pulse small and compressible, but not rapid, and temperature slightly subnormal. The abdomen was flat and the right rectus muscle tense; tenderness was seemingly as diffused as the pain. Deep pressure over the entire abdomen was not especially painful. A rectal examination was made later in the day, eliciting pain and tenderness at the brim of the pelvis on the right side. The psoas muscle on the right side was in a state of spasm. The diffuse abdominal tenderness did not become acute until it became localised in the right iliac region. The subsidence of general tenderness into an acute localised area occurred on the second day of the disease; subsequently recurring over the hypogastrium, denoting very conclusively the progress of peritonitis, from infection after rupture or perforation.

At no time was there tenderness above the umbilicus or over the liver. At the onset the pain was acute and general; later it became dull and more localised. According to Bryant,[2] the character of pain experienced denoted the involvement, primarily, of intraperitoneal tissues, directly affecting the splanchnic nerves, giving rise to the generalised character of pain and tenderness. Subsequently, the abdominal sympathetic nerves became paretic and then only the dull pain of connective tissue implacation was manifest. This symptom answered most closely the description given by Fitz:[3] "Sudden severe abdominal pain is the most constant, first decided symptom of perforating inflammation of the appendix." There was no pain in the testicle of the right side, and only in the bladder and rectum after peritonitis had involved those structures on the fourth day. Tumor could never be made out by palpation or percussion.

The urine was abundant and of high color. The course of disease, its treatment and termination were as follows: To relieve intestinal peristalsis, eight dosimetric granules of 0.0000625 of hyoscyamine with one of 0.0005 of strychnia were administered every half hour and 0.60

of bismuth subnitrate with 1 c. c. of chloranodyne as gastric sedatives were at once administered. I called again in about three hours and found the paroxysms somewhat ameliorated, the patient having had some sleep and had reacted from shock. In the evening the patient was easier, but with a rise of temperature to 100° F. and pulse marking 82 per minute. He had been practically unable to retain any nourishment, vomiting frequently during the day. The pain was less severe. The bowels had not moved. An enema was given with negative results.

To induce rest for the night, 0.01 of morphia sulphate was given hypodermatically, on which he rested reasonably well. On the morning of the 4th, I found him somewhat refreshed; he had vomited once or twice, but had retained some peptonised milk; temperature was 100.5°; pulse, 100. Pain decidedly relieved and the tenderness more localised in the right iliac region. Calomel in 0.012 doses was given every half hour for ten doses, to be followed by 5.00 of sulphate of magnesia in concentration every half hour, for three or four doses. The third dose was rejected by the stomach. The bowels had not moved and a soap and water enema did not induce a good movement. A few hours after, a high-up Epsom salts, glycerine and turpentine enema was given with a rectal tube with satisfactory results and the expulsion of considerable gas and hard dark-colored scybala. The patient was not allowed at any time to rise from the dorsal decubitus. Early in the afternoon I acquainted the friends with the seriousness of the case and requested counsel. Dr. Wm. H. Draper, of New York, was summoned and confirmed my diagnosis and agreed as to the necessity of early operation. Dr. Chas. McBurney was wired for, but he was out of town and did not arrive until 5 o'clock the following day.

During that day the patient had partaken of small quantities of peptonised milk, most of which were retained. In the evening the pulse was 125 and temperature 102°. He had not had any chills, but had had some slight rigors. A hypodermic injection of morphia sulphate 0.015 was given at 9 P. M. and some tablets of the same size left to be given by mouth if necessary before morning. One or two were given, but the patient had a poor night, was very restless and vomited several times.

On July 5th, the morning temperature was 102°; pulse, 135. The paroxysms of pain had ceased, the abdomen was still flat, the tenderness was marked on the right side and extended over the hypogastrium. By the aid of 0.015 doses of cocaine muriate, given fifteen minutes before taking the peptonised milk, he retained considerable nourishment and passed a more comfortable day. An ice bag was retained over the right inguinal region from the time the diagnosis was made, which added much to the patient's comfort. Two or three hypodermic injections of morphia 0.01 were given during the day to maintain quietness and splint the bowels to favor formation of adhesions. Pain was

complained of in urination. In the evening the condition of the patient had not materially changed, although the pulse was less rapid, being 100, and temperature 100°. On the arrival of Drs. McBurney and Francis W. Murray, at 6 o'clock P. M., July 5th, all preparations necessary having been completed, the patient was etherised and the operation commenced forty minutes after the arrival of the surgeons. A four-inch incision was made in the line of the linea semilunaris, and upon incising the peritoneum, thick greenish pus boiled out through the opening to the amount of about 60 c.c.

This was carefully wiped away and the abscess cavity explored digitally, which revealed an ulcerated appendix nearly severed in two. Two fecal concretions, sharp and with flat surfaces, the size of 1.25 c.m. by .75 c.m., had escaped and were floating in the pus. The abscess cavity was not walled off by any adhesions.

After evacuation of the thick fetid pus a quantity of sanious purulent fluid followed and the pelvis was carefully wiped out with dry sterile sponges. The appendix separated when raised to pass a ligature around the base. After cauterizing the stump and covering it with peritoneum it was dropped back into place and the peritoneal cavity thoroughly irrigated with a hot saline solution. The pelvic cavity contained several ounces of effusion; and lymph adhered to coils of intestines that were brought into view. Drainage was provided for by numerous strips of iodoform gauze, ramifying in all directions among the intestines and into the pelvis. A glass drainage-tube also was carried into the pelvic cavity. The external wound was left open with the drainage gauze protruding and the application of a large amount of antiseptic absorbent dressings completed the operation.

It became necessary to remove the outer layers of dressings on the following day, as the amount of drainage had completely saturated the entire dressings.

The patient recovered from the anesthetic and became perfectly conscious within an hour after being placed in bed. He only vomited once after the operation and did not require any morphia whatever after the first forty-eight hours. He slept and rested well most of the first night and voluntarily voided considerable urine at 5 A. M. A nutritive enema was given every four hours for two days; and after the full effects of the ether had passed off, small quantities of milk and vichy were allowed by mouth every hour or two. The patient scarcely complained of any pain or discomfort, rested quietly and improvement was rapid.

He was removed to his home on August 17th, and the wound entirely and firmly closed by August 27th. By September 1st he was practically well.

This gratifying termination—wholly unexpected at the time of operation by Dr. McBurney, and shared by Dr. Murray and myself—goes far to confirm the latter-day methods of surgical technique.

A case like this should dispel all arguments against the necessity of operation or hesitancy in doing it *early*. Had this been instituted three days earlier, no doubt it would have saved the patient much time in his convalescence.

We are hearing daily from a very large number of intelligent physicians arguments which, to those who employ them, at least seem reasonable. Yet, these same gentlemen will admit in a general way that pus pent up should be evacuated wherever it may be located. Should this not be a thousand times more so when the general peritoneal cavity—that great absorbing sac !—is in danger of being compromised ? Go still further : Is it not much better to lessen the chances of death by appreciating the condition in its earlier stages and applying the first principles of prophylaxis ?

We often hear at the consultation, " How can these terminations —of pus, perforation, ulceration, rupture, gangrene, and the like— be recognised to justify radical measures at the outset ? " It may be that the patient has had previous attacks and recovered (?). He may have absence of temperature and no tumor or fluctuation possible to determine—in fact, he may have a subnormal temperature and the pulse may give no indication of serious trouble or involvement of vital structures. But these are not arguments of logic ; they are born of inexperience and of misconception of the actualities which clinical cases demonstrate daily—often fatally.

Bacteriological investigations[4] have clearly demonstrated the fact that an appendix once infected is forever afterward a diseased organ until the lymphoid coat is destroyed.[5] If a recovery (?), so-called, has followed an attack, the lymphoid tissue retains the latent infection. If such be so—and why should a doubt exist on such evidence of the bacteriologist, verified daily by clinical examples,—what advantage is there in procrastination of operation in the face of existing acute symptoms ? The danger today of exploring the peritoneal cavity in such cases where grave doubt might exist, is almost nil when properly and carefully executed. It is an imperative duty to give a patient every chance of life and the highest ideal is the prevention of a recurrence of a disease. In the light of past experience it is manifestly more dangerous to defer and " trust to nature " than to

explore where doubt exists. The appendix vermiformis is a useless organ in our race, and is a constant source of danger to life in a large proportion of mankind. It can be removed without danger of compromising life and its removal does not encompass after-effects to anything like the risks of allowing it to remain diseased after attacks of appendicitis have occurred.

If one or more attacks have occurred, the appendix is more extensively diseased and its structures weakened; hence, it becomes manifestly more imperative in our early recognition of the disease to operate at once.

Temperature, fluctuation and tumor when not present do not constitute pathognomonic signs against the possibility of encysted abscess, ulceration leading on to perforation or gangrene with general septic infection.

There are few diseases that are more insidious in their onset at times; or more deceiving and difficult of recognition in respect to the actual condition, as it may exist wherein every moment adds to the danger of perforation or rupture of weakened tissues from previous attacks, which may have left old cicatrised ulcers or adhesions—the consequent contractions interfering with the circulation in a deformed appendix.

Perforation or slow suppurative processes from secondary infection of tubercle bacilli may develop, covering a considerable interval, and giving rise to scarcely any general disturbances until a fatal rupture of an abscess into the peritoneal sac occurs; or, a septic phlebitis of the mesenteric veins from thrombi or emboli; or, abscess of the liver; or, septic emboli swept into the lungs with abscess, gangrene or empyema, are possible consequences and may develop with lethal rapidity, defeating and defying the best efforts to save a patient's life; nor is a patient with a diseased appendix a safe risk for insurance.

The saddest commentary on conservative surgery (so-called) is for the patient to die. Perhaps, the next is an imperfect recovery and delayed convalescence when both are avoidable in the vast majority of these cases. It seems possible for a patient to recover from a severe general peritonitis, arising from a ruptured pus tube of gonorrheal origin, and occasionally, too, from a puerperal peritonitis, but never from an acute general septicemia from pyogenic infection with pus from a suppurative or gangrenous appendicitis.

It seems strongly inconsistent in those surgeons who admit

these principles and are governed by them in general surgical work, for them to oppose their application in this disease.

Year by year, the so-called "expectant plan" of treating disease is happily yielding to means born of better judgment, which research conducted in the wider fields of investigation, coupled with the aid of science and experience, is furnishing.

It is coming to light from the personal experiences of those who have "recovered" (?) from previous attacks of appendicitis, without operation, that the conservative measures which caused pus to become absorbed or encapsulated, (if they lived long enough,) inevitably have a recurrence and generally in an aggravated form as in other suppurative processes. As Morris has truly said, "Catarrhal appendicitis is a misnomer;" and as there is no pathological proof to the contrary, but great clinical proof that such does not exist, confirmed by the revelations of the microscope, it is better to give the patient the benefit of the doubt than speculate on a special form of catarrh never seen.

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IRRIGATION OF THE PERITONEAL CAVITY.

By JOHN T. PITKIN, M. D., Buffalo, N. Y.

WHENEVER the general peritoneal sac becomes the receptacle of a purulent discharge from (*a*) an hepatic abscess, (*b*) a suppurative mesenteric gland, (*c*) a pyosalpinx not radically removed, (*d*) pyothorax via the diaphragm, (*e*) suppurative peritonitis, local or diffuse, I would earnestly advocate reopening the umbilical fenestrum, the insertion of a soft rubber drainage-tube therein, allow of its free escape therefrom, followed by repeated irrigation *ad libitum* with a warm, sterilised, normal saline and antiseptic solution.

As to the desirability of thus thoroughly cleansing the peritoneal cavity for the relief of pyo-peritoneum in these days of modern antiseptic surgery, it seems to me, no progressive medical mind will question.

That the navel should be elected the point of entrance, let us look to anatomy, physiology and pathology as our indices.

Anatomically.—The navel presents the thinnest point in the abdominal parietes, consisting of varying amounts of cicatricial

tissue, the center of which is perforated by the whip-cord like remnants of the umbilical arteries, vein and urachus. Obviously the strength of the abdominal walls at the omphalos must vary extremely in different subjects. In many, especially the young,

before the scar-flesh has become strengthened by contraction, it is the point of least resistance. It is without adipose or muscular tissue, and for surgical purposes practically nonvascular.

Physiologically.—In intrauterine life the navel is the portal of communication between the fetus and the outer world, through the medium of the maternal blood.

Pathologically.—After birth the navel, not infrequently, in a limited manner continues to perform, or reassumes in the elimination of effete material, its embryonic usefulness—*e. g.*, I have seen in the practice of Dr. M. a child who voided his urine through a patulous urachus, and several instances are recorded where fecal matter has been extruded through an intestinal diverticulum at this aperture. I am informed by Professor Henry R. Hopkins of a patient in his clientêlage who suffered from an hepatic abscess which pointed at the navel, the patient making a good recovery. In this case adhesive inflammation protected the general peritoneal cavity from purulent invasion.

From some of my other colleagues I have been able to gather reports of three cases of general suppurative peritonitis in which the navel opened spontaneously, discharged for several days, was allowed to close again, followed by fatal consequences.

In contrast to the untoward result obtained from a let-alone or expectant plan of treatment, I would narrate the history of a little patient who came under my observation, was treated aggressively by peritoneal irrigation, and which has made that subject the purpose of this communication.

Julia M. K., aged 4, German descent; previous personal and family history good; only child. September 29th, after excessive gastronomic indulgence, enteritis ensued with twenty to thirty movements per diem. October 10th, stools infrequent, general peritonitis developed. November 1st, inflammatory processes subsided, patient allowed freedom of house. November 6th, small bunch, size of hickory nut, protrudes from navel. Physician being undecided as to its nature was dismissed from the case. November 9th, bunch has continuously increased in size, now as large as a lemon; constipation alternates with diarrhea. Second physician called. Diagnosis—from location, serous covering, crepitation and reducibility—umbilical hernia. Truss recommended. November 10th, rupture of bunch took place, considerable fetid matter liberated. November 18th, purulent discharge decreasing, opening at navel growing small, obstipation and emesis pronounced. November 19th, 20th, 21st and 22d, complete obstruction, all food rejected by stomach, emaciation marked, medicines of no avail ; prognosis of physician.

child must die. November 22d, 10.30 P. M., as a last resort the writer was summoned to the patient's bedside. The little face was drawn and pinched, pulse hardly perceptible at the wrist. For five days vomiting had been unabatable, nothing had passed the bowels, urine very scanty and high colored—nearly suppressed—emaciation was extreme, little more than skin and bone remained of an interesting child.

Her abdomen was greatly distended and tympanitic; most marked over the small intestines, dulness in hypogastrium. Diagnosis, pyoperitoneum and obstruction to lower small intestines by pressure and adhesions. Treatment: reopened navel, liberated large quantity of foul matter. Inserted soft rubber drainage-tube, through which liberal injections of warm water, sterilised by boiling and rendered alkaline, and antiseptic by the addition of Seiler's tablets, six to the pint. Similar injections were administered per rectum, peptonised food by mouth and rectum. Peritoneal irrigation was performed daily for over a week, then with longer intervals until the wash water returned perfectly clear. The navicular opening was then allowed to close, the patient making an uninterrupted recovery. By the process employed all foreign matter was removed from the peritoneum, its cavity cleansed and the adherent surfaces separated from each other by hydrostatic pressure. (See Fig., p. 549.)

Are we not led to conclude that the navel is a semi-normal passage, a sealed abdominal os, the reopening of which may be frequently indicated and accomplishable, either by natural forces or the surgeon's knife, with the danger of shock and collapse reduced to a minimum, and that thorough repeated aseptic irrigation of the peritoneal cavity may be demanded as a life-saving measure whenever that structure has been invaded by bacteria or their products?

206 CONNECTICUT STREET.

HISTORICAL SKETCH OF THE MEDICAL SOCIETY OF THE COUNTY OF ERIE.[1]

1821–1896.

BY FRANKLIN C. GRAM, M. D., Secretary.

WHEN a society has existed long enough to celebrate its seventy-fifth anniversary, it certainly becomes of interest to others than those associated with it. The Medical Society of the County of Erie has the honor of celebrating this event today. It deserves recognition, inasmuch as the history of this society also involves considerable of the history of Western New York.

1. Read by appointment at the annual meeting of the society, January 14, 1896.

It is unfortunate that the value of records was so little appreciated, and, furthermore, that through the many changes of administration the most valuable portions of the early records have been lost. Most of those still in existence are in the shape of reports written on scraps of paper, and by going through a chaotic mass of these—sufficient in quantity to fill several large baskets—I was enabled to make some kind of a connected story from the birth of the society to the present time.[2]

At the time of the society's organisation, Buffalo was but a village. One of the most prominent residents, as well as the foremost in his profession, was Dr. Cyrenius Chapin. He had an office on Swan street, on the site now occupied by the Chapin Block. As far as is known, no portrait of him is in existence, although on several occasions diligent search has been made for one. Dr. Chapin came from Massachusetts to Buffalo in 1805, when the place, which was then called New Amsterdam by Ellicott, had about a dozen dwellings. He took a prominent part in the war of 1812 and was surgeon to the military hospital. Later he became president of the county agricultural society and a trustee of the village. He died in 1838, at the age of 69 years.

When Dr. Chapin came here this was still Niagara county and a medical society was organised in 1808, thus giving that county priority in date. About the year 1820 the county was divided, thereby creating Erie county, and this gave Dr. Chapin an opportunity to organise a society in the new county. The first meeting was held at the house of P. M. Pomeroy, in the village of Buffalo, January 9, 1821, when an organisation was effected with the following officers: president, Dr. Cyrenius Chapin; vice-president, Dr. Daniel Chapin; secretary, Dr. John E. Marshall; treasurer, Dr. Lucius H. Allen; censors, Drs. Chas. Pringle, Sylvanus S. Stewart, Benjamin C. Congdon, L. H. Allen and J. E. Marshall.

The remaining charter members, making twenty-four in all, were: Drs. Ebenezer Johnson, Daniel Allen, Jonathan Hoyt, Daniel Ingalls, Charles McLowth, Josiah Trowbridge, Elisha Smith, Sylvester Clark, Jonathan Hurlburt, Rufus Smith, Ira G. Watson, Varney Ingalls, William H. Pratt, William Lucas, John Watson, Thos. B. Clark and Dr. Woodward.

Niagara county was represented in the state society in 1817 by Dr. James H. Richardson, and Erie county in 1823 by Dr. L. H. Allen.

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2. Since this article was written, a book supposed to be lost, containing the minutes from 1834 to 1871, has been discovered and is again in the possession of the society.

At the first meeting, Dr. Chapin delivered an address in which he, at that early date, inveighed against quacks, who did no end of harm, and also deplored the "strange inconsistency and cold ingratitude of the public toward the medical profession," and further, that "the truth is too obvious to require illustration, that the profession is far from maintaining the rank among the learned professions, which its consequence demands." He then called attention to the fact that a physician's services were undervalued by the public, and as they were not charitable institutions it was time to resolutely determine upon a total reformation.

In a "public notice," which he issued about that period, he felt it his duty to inform those indebted to him for professional services, that the time had arrived when imperious necessity compelled him to an immediate collection of his demands. Continuing, he says:

It has too long been a prevalent idea with the public that a physician's bill is never to be paid; and to call upon a patient when restored to health and to the enjoyments of life through the skill and attention of his physician, for a reward for the services rendered, is considered almost an insult and certainly a hardship. . . . . If there is a class of men in the community entitled to liberal compensation and prompt pay for their services, certainly physicians are. The enjoyment of health is first upon the catalogue of life's blessings and without it every other enjoyment is embittered. . . . . As a matter of self-preservation they must collect their debts, the people must reward them for their services, and the idea that they are not at liberty, from the general sense of the public on the subject, to force collections, as do other professions, but must drag out their lives in penury and distress, is both unjust and humiliating. To relieve my own necessities I am compelled to resort to immediate collections, and this I shall do without discrimination. Those, therefore, who feel it a privilege to save the costs of prosecution will find it expedient to bestow immediate attention to this subject.

Buffalo is under obligations to Dr. Daniel Chapin, who came from Connecticut in 1806, and settled on a farm in the locality which now comprises the park meadow and neighboring groves. Many of the trees which beautify that place were planted by him. He was noted for his antagonism to his namesake, claimed to be president of the Niagara county society, and died in 1821.

Dr. Ebenezer Johnson, whose name appears second on the list, but who, at that time, was about to retire from professional life, came to Buffalo in 1809, and served as surgeon in the War of 1812.

He subsequently went into business and became the first mayor of Buffalo. He built a stone mansion on Delaware avenue, which later became a residence connected with the Female Academy, and still stands.

Dr. Josiah Trowbridge, likewise a native of Connecticut, came here in 1811. Buffalo was too slow for him, so he went to Fort Erie, where he practised until the breaking out of the war, when his patriotic spirit induced him to return. He was president of the society in 1839, and its librarian from 1843 to 1853. He started the agitation which finally resulted in a law providing dissecting material through unclaimed bodies of persons dying in public institutions. He was the first president of the Buffalo Medical Association in 1845, was supervisor for several years, judge of the Court of Common Pleas, and finally mayor of Buffalo in 1837. He died in 1862.

Dr. John E. Marshall, another Connecticut man, was the first physician to settle in Mayville, and became clerk of Chautauqua county at its organisation in 1811. He was surgeon to McMahon's regiment during the war of 1812, and came to Buffalo in 1815. He was clerk of Niagara county in 1818, treasurer of the Erie county medical society from 1826 to 1828, its president in 1830, and the first health physician of the City of Buffalo in 1832. He died in 1838.

Dr. Jonathan Hoyt resided in Aurora, was judge of the county for several years, and died in 1850. Dr. Ira G. Watson settled in South Wales in 1812, residing there until his death in 1847, enjoying an extensive practice in the towns of Wales, Aurora, Holland and Colden. Dr. John Watson was the first physician in Aurora, in 1811; Drs. Daniel and Varney Ingalls in Springville, in 1818, and Dr. Wm. H. Pratt in Eden. Dr. Bela H. Colegrove came to Sardinia from Rhode Island, in 1820. He was president of the society in 1828 and died in 1874, having enjoyed during that period the reputation of being the most noted surgeon in this and the three surrounding counties.

Dr. Colegrove also became noted as the first physician to successfully antagonise the rules of the county medical society. This organisation, by the way, possessed very extraordinary privileges and was in turn compelled to follow certain rules regardless of the wishes of its members. No person was legally entitled to practise medicine or surgery in this county, except he was a member of this society. That made it compulsory for him to join, and, if otherwise

qualified, the society had no right to refuse him admission. On one occasion the majority thought differently and it cost the society about $600 to learn this fact. Likewise there was virtually no way of getting out and the society could exercise all sorts of discipline. One of the society's hobbies was to secure the attendance of its members at its meetings, or die in the attempt, and to accomplish that end a by-law was adopted imposing a penalty of $1.00 for absence at any meeting. That this rule was not intended as a dead letter is shown by the following resolution, adopted at one of the sessions: "Resolved, that the treasurer be directed to collect outstanding dues from members—peaceably if he can, forcibly if he must."

A large bundle of letters sent in response to an effort of the treasurer, under this resolution, still exists, and indicates the unpopularity of the proceedings. Most of these letters are interesting reading, but one of them was evidently intended for a place in modern literature, even at that period, for it contains the indorsement, "admirable"—presumably inscribed by one of the officers. It was written by Dr. Colegrove to Dr. Marshall, and dated Sardinia, June 11, 1838. In it Dr. Colegrove protests against paying fines for non-attendance because the rule is unjust and discriminates against members. He said that he lived thirty miles from the place where the meetings are required by law to be held, and to go there twice a year meant a sacrifice to him of some $15 or $20, or pay a penalty, which the city members could avoid by the sacrifice of so many pence! He did not think he ought to compromise the interests of the community where he resided through neglect caused by attending the meetings of a medical society! "It is not the amount," said he, "at which I complain, but the principle, and I would as soon—and with equal justice—make the penalty for non-attendance 'imprisonment in the county jail for the term of six months,' as to have it as it now is."

Dr. Luther Spaulding, of Williamsville, became sarcastic when asked for $7.00 in fines and wanted to know if there was not some mistake about the entire affair and that he ought to be charged with fines for ten years more. Another doctor said there was already one judgment against him and the society was welcome to the second! Dr. W. H. Pratt, of Eden, presented his compliments and said he possessed only a small share of the good things of this world; he had never attended the society's meetings and could

not now, owing to physical debility—but they appear to have kept on fining him just the same.

Dr. Austin Flint, the founder of the BUFFALO MEDICAL JOURNAL, DR. F. H. Hamilton, Dr. James P. White and Dr. John C. Dalton—all men with more than a national reputation—fared no better. In the ledger, Dr. Flint is charged with $1.00 tax, or dues, and only $4.00 fines to begin with. The same proportion continues throughout his entire account.

This ledger, by the way, is another curiosity, and is the only remnant of the earlier days which makes any attempt at regularity. It was evidently in the hands of a systematic bookkeeper for a number of years. Whenever the debtor side got too large he had the fines remitted by resolution, so as to balance the account. In Dr. Gilbert McBeth's account he is credited with "Death by cholera, $6.00,"—whatever that meant,—and this was afterward remitted by the society to force a balance.

The first treasurer's report obtainable is dated January 9, 1827, and is signed by Dr. Marshall. It shows that the receipts for the previous year were $11.00 and the disbursements $8.00. At that time there were twenty-four books in the library. In 1830 the treasury contained six shillings, while the debts amounted to $10.50. The receipts did not grow very much for the next thirty years, until in 1858 the society was well enough situated to incur $52.00 legal expenses for prosecuting one of its members, and lost its case at that.

The society appears to have been among the first in the State to appreciate the value of vital statistics and drafted a bill which was sent to the legislature. It also devoted much attention to the subject of vaccination, and was always aggressive in the various branches of medical science. This society is also mainly responsible for the present higher medical education law, as well as the one to regulate the practice of medicine, and to Dr. Edward Storck undoubtedly belongs the credit, in a large measure, of bringing this question to a successful issue.

Many physicians of note, during the earlier and later periods, can only be given a passing mention. Among them are Dr. Bryant Burwell, who came to Buffalo in 1824, was associated for a time with Dr. Chapin, and later held, perhaps, more positions of note than any of his medical contemporaries. His active career ended in 1862. Dr. Alden S. Sprague, 1825–1863; Dr. Charles Winne, a prominent surgeon, 1833–1877; Dr. Gorham F. Pratt;

Dr. George Burwell; Drs. H. B. Camp and G. H. Lapham, of Aurora; Dr. J. E. Hawley; Drs. I. H. Hopkins and Young, of Tonawanda; Dr. B. A. Batty, of Boston; Dr. Harvey H. Hubbard, of Springville; Dr. N. D. Sweetland, of Evans; Dr. Wm. A. Green, of Black Rock; Dr. Chas. A. Hyde, Lancaster; Dr. Jabez Allen, Aurora; Drs. Grove C. Gage and J. B. Pride, Alden; Dr. James Ives, Wales; Dr. Wm. Van Pelt, Williamsville; Drs. M. G. Lewis and Nathan Way, Black Rock; Dr. Josiah Barnes, a Yale graduate.

Dr. Austin Flint, already mentioned, came from Massachusetts in 1836, joined the medical society in 1841, was health physician in 1842, established the BUFFALO MEDICAL JOURNAL in 1845, and removed to New York in 1859.

Another physician to attract marked attention was Dr. James P. White, who studied with Dr. Trowbridge, and graduated in 1834. The establishment of the Buffalo Medical College, in 1846–1847, was largely due to his energy. He became the most noted obstetrician and gynecologist of his time, was the inventor of "White's obstetrical forceps," and the first to teach midwifery by practical or bedside demonstrations. He was one of the most active founders of the Buffalo Hospital of the Sisters of Charity, the Maternity and Foundling Hospital, the Providence Insane Asylum, the Buffalo General Hospital, and the Buffalo State Hospital. Besides the part he took in matters pertaining to his profession he was active in the Young Men's Association, the Academy of Fine Arts, the Historical Society and the Church Charity Foundation of the Episcopal Church.

Dr. Thomas F. Rochester, a member from 1854 to 1887, is too well remembered by the present members to need any special reference here.

The oldest living members of the society are: Dr. James B. Samo, who joined in 1844, after having practised here for four years. He was president of the society in 1862, and its librarian from 1852 to 1892—a period of forty years; Dr. John Hauenstein, a member since 1844; Drs. Louis P. Dayton and C. C. Wyckoff, since 1849; Dr. John Boardman, 1853; Dr. Edward Storck, 1854; Dr. George Abbott, 1855; Drs. Henry Nichell and F. F. Hoyer, 1857, Drs. John Cronyn and Leon F. Harvey, 1860; Drs. Thomas Lothrop and E. L. Bissell, 1861.

The presidents of the society since 1834 were as follows: 1834, Dr. Emmons; 1835, Dr. Alden Sprague; 1836, Dr. H. H.

Bissell ; 1837, Dr. J. E. Hawley ; 1838, Dr. M. Bristol ; 1839, Dr. J. Trowbridge ; 1840, Dr. E. Wallis ; 1841, Dr. G. F. Pratt ; 1842, Dr. Josiah Barnes ; 1843, Dr. J. B. Pride ; 1844, Dr. W. K. Scott ; 1845, Dr. O. Wakely ; 1846, Dr. F. L. Harris ; 1847, Dr. Parsells; 1848, Dr. C. H. Austin ; 1849, Dr. Wallace ; 1850, Dr. Chas. H. Wilcox ; 1851, Dr. A. S. Sprague ; 1852, Dr. L. F. Ham; 1853, Dr. P. H. Strong ; 1854, Dr. J. G. House ; 1855, Dr. James P. White ; 1856, Dr. Wm. Van Pelt ; 1857, Dr. F. H. Hamilton ; 1858, Dr. Austin Flint ; 1859, Dr. L. P. Dayton ; 1860, Dr. Wm. Treat ; 1861, Dr. Sanford Eastman ; 1862, Dr. J. B. Samo ; 1863, Dr. Chas. Winne ; 1864, Dr. C. C. Wyckoff ; 1865, Dr. C. C. F. Gay ; 1866, Dr. George Abbott ; 1867, Dr. Thomas Lothrop ; 1868, Dr. John Boardman ; 1869, Dr. O. K. Parker ; 1870, Dr. Julius F. Miner ; 1871, Dr. Wm. Gould.

From 1872 the society's records are complete. The principal offices since then were held by the following gentlemen : 1872, president, Dr. William Ring ; secretary, Dr. David E. Chace ; treasurer, Dr. Wm. C. Phelps. 1873, president, Dr. Jabez Allen; secretary, Dr. Chace ; treasurer, Dr. Phelps. 1874, president, Dr. Thos. Lothrop ; secretary, Dr. Chace ; treasurer, Dr. Phelps. 1875, president, Dr. John Cronyn; secretary, Dr. Chace; treasurer, Dr. Phelps. 1876, president, Dr. John Cronyn ; secretary, Dr. D. W. Harrington ; treasurer, Dr. Phelps. 1877, president, Dr. Henry Lapp ; secretary, Dr. Harrington ; treasurer, Dr. Phelps. 1878, president, Dr. Edward Storck ; secretary, Dr. Harrington ; treasurer, Dr. Phelps. 1879, president, Dr. S. F. Mixer; secretary, Dr. Harrington ; treasurer, Dr. Phelps. 1880, president, Dr. F. F. Hoyer ; secretary, Dr. Harrington ; treasurer, Dr. Phelps. 1881, president, Dr. John Hauenstein ; secretary, Dr. A. M. Barker ; treasurer, Dr. F. W. Abbott. 1882, president, Dr. T. M. Johnson; secretary, Dr. Barker ; treasurer, Dr. Abbott. 1883, president, Dr. S. E. S. H. Nott ; secretary, Dr. Barker ; treasurer, Dr. Abbott ; 1884, president, Dr. J. C. Greene ; secretary, Dr. Edward Clark ; treasurer, Dr. Abbott. 1885, president, Dr. J. B. Andrews ; secretary, Dr. Clark ; treasurer, Dr. Abbott. 1886, president, Dr. E. T. Dorland; secretary, Dr. Wm. H. Thornton; treasurer, Dr. Abbott. 1887, president, Dr. O. C. Strong ; secretary, Dr. Thornton ; treasurer, Dr. Abbott. 1888, president, Dr. John D. Hill ; secretary, Dr. Thornton ; treasurer, Dr. Abbott. 1889, president, Dr. R. L. Banta ; secretary, Dr. Thornton ; treasurer, Dr. Abbott. 1890, president, Dr. G. W. McPherson ; secretary, Dr. Thornton ; treas-

urer, Dr. Abbott. 1891, president, Dr. E. C. W. O'Brien; secretary, Dr. Eli H. Long; treasurer, Dr. Abbott. 1892, president, Dr. Wm. Warren Potter; secretary, Dr. Long; treasurer, Dr. Edward Clark. 1893, president, Dr. John Parmenter; secretary, Dr. Long; treasurer, Dr. Clark. 1894, president, Dr. Wm. H. Gail; secretary, Dr. Franklin C. Gram; treasurer, Dr. Clark. 1895, president, Dr. Frederick W. Bartlett; secretary, Dr. Gram; treasurer, Dr. Clark. 1896, president, Dr. J. G. Thompson; secretary, Dr. Gram; treasurer, Dr. Clark.

The society now has 338 members.

LOCALISED PERITONITIS.[1]

By C. O. BAKER, M. D., Auburn.

I WISH simply to detail a few cases of peritonitis which have clearly had a local origin:

CASE I.—In August, 1892, I saw a woman, twenty years old, who twenty-four hours before my visit was taken violently ill with pain in the abdomen, of a diffuse character, accompanied with great swelling and tenderness. In short, all the symptoms of peritonitis were present in a severe form, demanding immediate relief.

As the cause of the condition was not clear, celiotomy was decided upon and search made for the lesions, which were found to be under the gastro-splenic omentum, where there was found a circumscribed collection of pus, about one drachm, walled in by the matting together of the surrounding tissues. The pus was washed away, adhesions broken and the wound closed without drainage. Recovery was uneventful and rapid.

This woman gave a history of a misstep while walking on the sidewalk, causing sudden and severe pain in the region of the spleen.

CASE II.—May 30, 1893, I saw Mrs. L., aged 32. She gave a history of ten days' sickness, beginning with localised pain in the region of the spleen, rapidly extending over the abdomen. At my first visit the abdomen was so swollen as to make it quite impossible to determine the condition of its contents. Section was made. Exploration revealed a large amount of free fluid and the spleen displaced downward and enlarged to seven or eight times its normal size, the gastro-splenic omentum constricted by bands of inflammatory origin, interfering with the circulation of that organ. The spleen was punctured and allowed to bleed freely. The inflammatory bands were destroyed, the wound

1. Read at the twenty-eighth annual meeting of the Medical Association of Central New York, at Syracuse, October 15, 1895.

closed with drainage, which was left until the spleen had recovered its vitality (fifty-two hours). No cause is known in this case for the local peritonitis causing the trouble with the spleen. Patient made a perfect recovery.

CASE III.—In June, 1893, I made an exploration of the abdomen of a man, an inmate of Auburn prison, who had a large, hard growth in the region of the spleen, which followed an attack of localised peritonitis, occurring three months previous to my examination. I found the spleen spherical in form and about six and one-half inches in diameter, very hard and the color of dark venous blood. The vessels in the gastro-splenic omentum were firmly constricted by inflammatory bands in such a manner as to greatly retard the return circulation. These bands were broken and the tumor gradually reduced in size. The supposed cause was lifting heavy weights while working in the foundry. The man was discharged from Auburn prison and lost from observation.

CASE IV.—In July, 1895, I saw Mrs. M., aged 45. She gave the following history—namely, eighteen months previous to my visit she suffered severely from the passage of a gall-stone, followed by localised peritonitis, from which condition she had never recovered. At my first visit I found her extremely emaciated, troubled with constant vomiting, complete paraplegia, the stomach displaced to the level of the umbilicus by a firm inelastic growth. Section was made and exploration revealed enlarged gall-bladder, with walls one-fourth of an inch in thickness, and containing about one gallon of brownish yellow fluid. The contents of the sac was drawn off. An examination of the gall-duct showed it to be firmly constricted, completely closed. The adhesions constricting the gall-duct were broken up and the duct dilated, establishing communication with the bowel, drainage-tube introduced and wound closed. At the end of the first week the biliary secretions were found mixed with the feces. The drainage opening was allowed to close and the patient took and retained food.

65 EAST GENESEE STREET.

IN THE Tuilleries Garden stands a circular building, devoted to the history of France for 100 years, shown by the patriotic figures of the great characters of the country during that period of time. One of the most interesting sights in Paris during the last great exhibition, was this striking pictorial view of what France had done in war, science and art for a century. Standing out on the canvas, in a most life-like manner, from a great circular panorama of kings, emperors, generals, statesmen and artists, is the figure of Pasteur. It is, indeed, a delight to see a great medical scientist thus honored; although it may be truly said that France honors itself in honoring Pasteur.—*Post-Graduate.*

Clinical Report.

A FEW INTERESTING CASES.

Lupus Vulgaris—Syphilis—Erosion of Cervix Uteri—Endocervicitis with Prolapse of Bladder.

By F. W. MALONEY, M. D., Rochester, N. Y.

CASE I.—*Lupus Vulgaris.*—Miss F., aged 19, American; father died of pulmonary trouble; mother, a brother and a sister are living; came to me February 7, 1895. She had an ugly-looking nose, from which she had been suffering for six months, and had been taking medicine and local treatment. Crusts had accumulated to fully one-half inch in thickness on both sides of the nose, making it a disgusting object to look upon. She was anemic and run down in health. I began treatment by removing all the crusts and then, under cocaine anesthesia, with a sharp curette I scraped the ulcerated area quite thoroughly.

After bleeding had ceased, I applied pure lactic acid. The soft palate and upper surface of the throat contained several ulcers and these I also touched up with lactic acid. I ordered cod liver oil and a mixture with tincture chloride of iron, and bade her return on the next day. On the following day the diseased area was covered over with crusts, which were removed with some difficulty. I again applied lactic acid, and this I continued for ten days and at the end of that time there was no improvement whatever. There was an eroded appearance and the ulcers were spreading. I then used pure carbolic acid after another scraping, and applied unguentine. Followed this treatment every day for a week; no improvement. I then used nitrate of silver in stick form, and applied lanoline as an emollient, but abandoned this treatment after a week's trial. I then touched the ulcers with pure nitric acid for a few days; this seemed to freshen the surface, and the ulcers looked as though they were healing; but after a month had passed my patient was no better. I next turned to icthyol, and at the end of a week this seemed to take hold, there was quite a perceptible difference in the size of the ulcers, scabs were drying up, and at the end of two months of this treatment I discharged her as cured. But such was not the case; after six weeks, she returned and her nose looked as badly as before I began treatment. I scraped the parts again and applied icthyol, and kept it up every day for three weeks, but the ulcers would not heal. She was still taking the iron and cod liver oil. I applied aristol, sennine, and zinc ointment in their turn, and then went back to nitric acid, nitrate of silver, lactic acid and tincture perchloride of iron; another month passed by and no healing occurred. I was getting discouraged. I found nothing new in Burnet's System of the Nose and Throat, American Text-book of

Surgery, Reference Hand-book of the Medical Sciences and the current journal literature at my command. At the end of eight months she had the same ugly-looking nose as she had six months before. During the past few months my attention has been drawn to the brilliant results in the treatment of tuberculosis, diphtheria and other systemic diseases with protonuclein and nuclein solutions, as advocated by Prof. Aulde, of Philadelphia; Prof. Vaughan, of Michigan; Dr. Knapp, Dr. J. Mount Bleyer and others. As lupus is a tuberculous disease, I determined to make another effort for my patient, and procured an ounce of Messrs. Reed & Carnrick's special protonuclein powder. After again curetting the lupus area of the patient's nose, I dusted on the protonuclein from an ordinary powder blower, and did nothing more, but bid her to come next day. On the next visit the crusts were not so adherent and there seemed to be some improvement. After cleansing the surface I again dusted on the protonuclein powder. On the following visit there was a decided improvement, healthy granulations had sprung up, and a tendency to heal at the edges was apparent. On the third day the result was, indeed, surprising. No crusts formed; a dry surface remaining; the ulcers healthy and closing. I dusted the powder on the ulcers in the throat, and at the end of six days the nose had assumed a quite normal appearance, the tuberculous ridges smoothing out, all the ulcers completely healed, and those of the throat healing as well. This, to me, is a remarkable result in so short a time. Six months have now passed, and the patient says she feels better than she has in a long time.

CASE II.—*Tertiary Syphilis.*—Mrs. G., aged 34, married seven years; has no children; had sore throat and sore on lower lip before she was married. Was called to attend her on account of a large sore on the left side of the face. I found that the ulcers extended from the temporal region to the ramus of the lower jaw and including the left ear. There were several large holes eaten in the cheek, and the lower lobe of the ear had been eaten away. A thick, foul-smelling exudate covered the ulcers, which made the patient look as though she was suffering from one large rodent ulcer. The left eyelids were swollen, also the ear to twice its normal size. She said she experienced no pain to speak of, but that she could not see out of the left eye on account of the swollen condition. This state of affairs had been coming on about two weeks. I dusted the whole surface with the protonuclein powder and pinned on a clean piece of linen about the face. I ordered iodide of potash in xv. grain doses. When I saw her the next day, there seemed to be some improvement, as the swelling had gone down somewhat in the eyelids, and she said she took a few large pieces of the necrotic tissue out of the holes during the washing. I dusted the protonuclein powder well into the ulcers at each visit, and on the fourth day of the treatment there was a healthy granular appearance. The swelling in the eyelids

and in the ear had subsided. I am satisfied that the potash salt alone could not bring about this result in so short a time. At the end of ten days there were no ulcers left; the holes had filled in with healthy granulations, and these were even with the skin of the face. On the seventeenth day I discharged her cured. In this case the protonuclein seemed to act as a direct antitoxic and antiseptic, as well as a food to the tissues.

CASE III.—*Granular erosion of the cervix.*—Mrs. K., aged 32, mother of four children; in second last confinement there was a torn cervix, which was not attended to at the time, or since. She came to me complaining of falling of the womb, backache and inability to do her housework. On examination, I found the uterus low in the pelvis. The cervix had been torn on the right side and about the external os was a severe state of granular process. The tear in cervix was small and as the patient was nursing her last baby I did not deem it advisable to operate. I dusted the protonuclein powder well into the erosions and applied a wool tampon, soaked in glycerine. Repeated the treatment twice a week. In two weeks the cervix had a healthy appearance and the granulations nearly all gone. In four weeks she felt well and cured.

CASE IV.—*Endocervicitis and complete prolapse of the bladder, ten days before confinement.*—Mrs. K., aged 30; had two children; with the last one version was performed. Was called hurriedly, as she was about to be confined for the third time. I found her suffering a great deal of pain about the bladder. She said she had to urinate every ten minutes. On examination, I found a partial prolapse of the bladder. She had no real labor pains and after antiseptic precautions I pushed the bladder back with my hand. I found the cervix inflamed, some discharge, and the vaginal walls flabby. After a vaginal douche, I used a wool tampon saturated in glycerine, covered with the protonuclein powder and packed well against the cervix. I renewed the tampon every day for a week, when the patient said she felt well enough to get out of bed until her time should came. This I permitted her to do and three days after regular labor pains came on, when I delivered a full-term male child. I followed up the tampons and protonuclein powder for several days after and she is now feeling very well. I have since used the protonuclein powder on an injury to the vaginal wall after forceps delivery and did not have a particle of temperature.

Protonuclein seems to be nature's tissue builder and a direct antitoxic. It has to deal with the important function of cell life. Dr. Knapp says:

That it is sufficient to know that the cell is the seat of all the functions of the human body—nutritive, secretory, excretory and correlative—and that in health and disease we are concerned with the cell and not with the organism as a whole; that the vital processes take place

in the cell, and that the equilibrium between anabolism and katabolism, repair and waste, may be taken as a definition of health; that certain physiological functions of the cells—chemotaxis, phagocytosis, cell proliferation and defensive proteids are the functions concerned; immunity, vital resistance and the cure of disease.

That protonuclein increases the number of white cells has been clearly demonstrated by not a few investigators, and with this increase of white cells (leucocytosis) defensive action is produced, which becomes readily apparent in the treatment of disease.

332 WEST AVENUE.

Translation.

DILATATION OF THE ESOPHAGUS CAUSED BY A STRICTURE IN THE CARDIA.

BY DR. E. G. JOHNSON.

Condensed abstract from *Hygeia*, October, 1895.

Translated by L. G. SELLSTEDT, Buffalo.

IN THE first case described, the details in support of neurotic etiology may be comprehended under the following heads: improper food, irregular meals, deprivations in a rigid climate and nervous strain due to the duties of the position of the patient, a young clergyman, who, at the age of twenty-six, became troubled with intercostal rheumatism with swelling of the left hand. This continued till he was thirty years of age. During this time he also had frequent pains in the region of the left jaw with accompanying flow of saliva. At last an abscess formed without serious consequences. In 1892, his duties compelled many journeys under privations in Lapland and in February, 1893, he became aware of a difficulty in swallowing, so that it was necessary to wash down his solid food with liquids. Soon after he was taken with severe colic-like pains in the cardiac region, which the following year recurred with intervals of days or weeks. These attacks came on at night, generally, after a while in the latter part. They usually began with an itching sensation in the region of the xiphoid process, which soon changed into boring pains and as if pinched with tongs. The pains spread to the lower part of the thorax and he became tender to the touch over the inferior part of the sternum. Occasionally, especially from the close of 1893, these pains even

invaded the throat and angles of the jaws, the posterior portion of the tongue and the walls of the larynx. They were sometimes absent if at the beginning of the paroxysm he shifted his position from left to right. They were oftenest mitigated by drinking cold water.

About this time both solid and liquid aliments would lodge in the esophagus, causing distress and burning sensations and, in spite of all efforts to swallow, both meat and drink would often come up unchanged, though he sometimes succeeded in getting food into the stomach after drinking. With these swallowing movements he experienced a bursting sensation in the chest, till the food had found its way into the stomach. Sometimes the food remained several hours in the gullet, but at such times the patient after a while was enabled to relieve himself by vomiting, the contents being more or less mingled with mucus. Whether the food remained in the esophagus or was ejected, he felt vertigo and uncertainty in his walk. Generally, the difficulty of deglutition was greatest at the beginning of a meal; if it succeeded then all would go well. The difficulty of swallowing returned at all kinds of troubles and cares, as when he feared the food would stick fast, when he felt himself observed, and the like. The evil was aggravated by public meetings, at church services, marriages, and the like, when he was compelled to extemporise. The irritation of the esophagus by the retention of aliments soon brought on severe coughing spells at night, which were only relieved by vomitings, which he felt were wholly from the esophagus. After this a drink of water would produce calm and sleep. Iodide of potash and vichy were given for the cough, and for the pain in the gullet, iron arsenic, quinine and opium with good effect. Lately, the patient has tried to evacuate the gullet before meals to aid the passage of food into the stomach. The urine has always been dark with red sediment. The patient has never had lues, has committed no excesses and never has used ardent spirits to excess. The 8th of July, 1895, a stomach tube 1.9 cm. in diameter was introduced and an obstruction was found 49 cm. below the dental range. This obstruction, after some seconds of gentle pressure, gave away so that the tube during a few moments passed through a rather narrow channel to go farther without hinder. The place where the sound stopped was directly under the point of the xiphoidal process. A tube of 1.5 cm. found the obstruction 46.5 cm. below the teeth and then, after a moment's gentle pressure, slid through

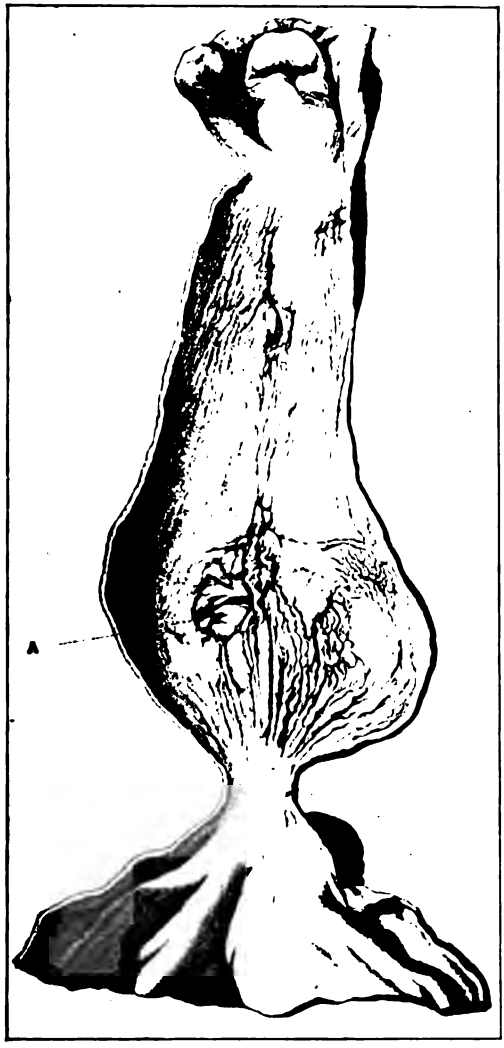
the constricted place. No pain was felt by the insertion of the instrument.

From July 22d electricity was used upon the patient. After he had drank a glass of water an electric sound was carried down to the cardia and put into communication with the galvanic current. The opposite pole was applied by turns, to the left of the vertebral column, between the sixth and eighth ribs, to the pit of his stomach or the sternum in seances of from ten to fifteen minutes. Ronsegno and Vichy water was ordered for the patient, who, since the 8th of July, had taken forty grains of bromide of soda daily.

Present state, August 2d and the following days: patient's intellect is clear, memory and cheerfulness unimpaired; he measures six feet, weighs 195 pounds, has a powerful frame, slender, normal adipose painculus, firm muscles, skin of normal appearance, with usual sensibility to touch or cold and heat, feels stiff about the eyes when he awakens, all his senses normal, the tongue exhibits throughout the whole length a yellow-gray covering, the soft palate and the pharynx are somewhat redder than usual, the neck of usual dimensions, its great blood-vessels not unusually protruding, no struma, no swollen glands. Examination of the head of the gullet with laryngoscope shows a slight thickening of the mucous membrane over the arytenoidal and santorini cartilages, nothing else abnormal; voice is clear as ordinarily, thorax well formed, the breathing regular, nothing remarkable in the percussions of the chest forward or at the right side of the back; at the back to the left it is the same when the patient has not newly eaten, but after a full meal the percussion here is plainly shorter from the seventh to the tenth vertebra. When the esophagus is extended with air, or when he has drank wine-acid with bicarbonate, the percussion tone in these places is somewhat clearer with but little tympanitic perception. The patient has, sometimes at night, his usual pain in the cardiac region, up along the gullet, the posterior parts of the tongue and pharynx wall and the angles of the jaws. The food has begun to pass with more ease into the stomach. The cough after washing out at bedtime is ameliorated. He has now gone home, but a letter from his physician informs me that he continues to improve, though he still finds difficulty of swallowing.

The second case is that of a tinsmith, aged 62, who in his thirty-second year found difficulty in swallowing his food. This remained above the pit of the stomach and could not be got down.

The patient went once eight days without food. At other times the food, the day after eating, came up wholly unchanged most



DILATATION OF THE ESOPHAGUS FROM STRICTURE OF THE CARDIA.

frequently mixed with mucus, sometimes dissolved and offensive. He also felt, in swallowing solid food and in walking, a smarting above the pit of the stomach, and was then compelled to drink

cold water to subdue the pain. He could never eat a meal without taking two to three large glasses of water. When he had drank a large quantity of cold water, the food at last entered the stomach under such powerful swallowing efforts that the veins in his forehead became swollen. Liquid food always passed down easier than solid. He got better in course of a decade, but still he was unable to get his food down unobstructed or without pain, and aliments caused a smarting in the gullet. The action of the bowels had been slow during these years. In the Winter of 1891 he received a blow in the lower part of the breast at the left side, and since then the smarting sensation has returned oftener than before. He vomited blood twice in the end of July, 1891. After this time the above distressing symptoms became worse than ever. His disposition was rendered irritable and nervous by the disease, and through economical cares. He has used ardent spirits during the latter years, but not to any considerable extent; his sleep has been generally good. He was examined on the 17th of July, 1891, and he then complained of the above-mentioned pain under the lower part of the sternum when swallowing food which, together with the drink, remained there, and of the oft-recurring vomitings which were sometimes mixed with blood. The contents of two of these were examined and they contained neither hydrochloric acid or peptones, but lactic acid. The attempt to introduce a sound did not succeed on account of the severe pain to the patient when it was pushed down into the esophagus. Nothing remarkable about the urine. Ordered liquid aliments together with pancreatin + bicarbonate $\overline{aa}$ c.g.m. 50, four times a day. The patient did not return afterward.

I did not see him again till the 26th of April, the following year, 1892. He had felt well since the year before, but was now in bed, complaining of pain in the joints, was dry in the throat and could neither get down food nor drink. His sleep was interrupted by pains about the inferior part of the sternum and in the joints, which were tender to the pressure. At the same time they were not perceptibly swollen. The patient was stiff in the neck and could only with difficulty sit up in bed. Still no considerable fever. The tongue had a gray-white covering, the fauces of a deep red. The abdomen hard to the pressure, but little yielding, evacuation only after enema. The urine free from abnormal material. The heart-tones clear, but weak. Ordered salicylate of soda in solution, of which the patient did not get down more than

three grains. He began to perspire, and the next day felt better in the joints. Nourishing enema with morphine suppositories were ordered, but the enema was not retained, though the morphine gave relief from the pains, and quiet with a few nights of good sleep. As he was unable to take food, his strength shortly decreased and he died the 10th of May, 1892.

At the autopsy, which was performed the following day, the walls of the esophagus in its whole length of 26 cm., from the cricoid cartilage to the cardiac orifice, were considerably thickened. It is in its whole length widened downward, measures 6 cm. from the cricoid, cut open 7 cm. with a lumen about 2.2 cm. diameter, the thickness of the wall 0.3 cm., little further down the breadth is 8 cm., with a lumen of 2.3 cm. and wall 0.4 cm. Between its third and fourth part the breadth is 12 cm., a lumen of 3 cm., and 0.5 cm. wall from this the esophagus was suddenly constricted so that its breadth directly above and in the cardiac orifice is 2.5 cm. with a lumen 0.7—0.8 cm. in diameter with a wall thickness of 0.2 cm. (see illustration, p. 567).

The mucous membrane of the esophagus is lengthwise, strongly corrugated and thickened, measuring in the lowest quarter more than 0.1 cm. in thickness. About 1 cm. above the cardia is observed in the mucous membrane a loss of substance with cadaverish, slaty-colored surrounding and bottom, and here in the mucous membrane is a nearly circular spot of 2.5 cm. diameter, completely destroyed by ulceration, so that here is a sore with here and there projecting pointed deviations of the mucous membrane which shoots up toward the ulcer (see Fig. A). In its bottom may be seen crossing muscular fibers with the partly ulcerated thickened sub-mucus. The mucous membrane of the cardia is perfectly smooth, soft and normal. Below the cardia, on the back of the stomach, near the lesser curvature, may be observed a glandular body of the size of a bean.

The posterior and inferior parts of the lungs were found of a brittle consistency, red-brown in the section with pressure. A reddish-brown liquid exuded from the parenchyma; some of the bronchial glands were found large as peas, black and calcified. Such a gland adheres to the wall of the esophagus in a situation corresponding to the before-mentioned ulceration, and in pulling on it exhibits on the place of the ulceration, a slight but plainly marked funnel-formed depression. The stomach and other viscera give no evidence of disease, with the exception of a slight enlarge-

ment of the Peyer glands and a bloody infiltration of the large intestine. . . . . .

Society Proceedings.

MEDICAL SOCIETY OF THE COUNTY OF ERIE.

Annual Meeting, January 14, 1896.

Reported by FRANKLIN C. GRAM, M. D., Secretary.

THE Medical Society of the County of Erie held its annual meeting Tuesday, January 14, 1896, and at the same time celebrated the seventy-fifth anniversary of its existence. The rooms of the Buffalo Academy of Medicine, where the session was held, were inadequate to furnish seating facilities for the large number of physicians who had come to participate in the event.

Dr. J. G. THOMPSON, of Angola, the vice-president, called the meeting to order at 9.30 A. M., and announced that the president, Dr. Bartlett, was confined to his home by illness and was consequently unable to be present. The minutes of the semi-annual, as well as of the special meeting held in memory of the late Dr. M. B. Folwell, were read and approved.

On motion of Dr. A. A. HUBBELL the following resolution was unanimously adopted:

Resolved, That the Medical Society of the County of Erie, now in annual session, expresses its sincere sympathy to its president, Dr. F. W. Bartlett, in his distressing illness.

The VICE-PRESIDENT stated that he did not prepare an annual address, as he had expected this to be done by the president, and on motion of Dr. J. J. Walsh he was excused.

Dr. J. B. COAKLEY, chairman of the Board of Censors, made a verbal report. He stated that Dr. King, whose case was referred to at the June meeting, had suddenly disappeared as a sequel to the censors' efforts. They had found no more irregularities in Marilla, and had received word that a physician was illegally practising medicine in North Evans, but on investigation found that this was not the case. Complaint was also made against Dr. Weinbach, of this city, who was said to have no diploma. On investigation the board found that he had actually three diplomas and a license to practise. A case from Tonawanda was also referred to the board.

This man afterward located in Buffalo and said he did not use materials, but inherited from his father power to control disease. He claimed not to practise in violation of law, but the District Attorney, before whom the question was laid, thought otherwise, and the case is now before the Grand Jury. A Dr. Jones had also left town through the board's efforts. Another case of a clairvoyant doctress was still under advisement. All the expenses incurred were those of securing a copy of the list of qualified practitioners who were registered with the County Clerk, and this amounted to $2.00. He commended the District Attorney on his willingness to assist the board at all times.

The report was received and the thanks of the society extended to the board for its efforts.

Dr. LUCIEN HOWE bore testimony to the willingness of the District Attorney to coöperate in the prosecution of violations of the medical law. A midwife had just been convicted for failing to report a case of ophthalmia neonatorum—but as it was the first conviction under this law the justice suspended sentence.

Dr. LUCIEN HOWE, chairman of the special committee on arrangements for the seventy-fifth anniversary, made a report of what the committee had done, as shown by the program and circulars sent the members.

Dr. G. W. MCPHERSON, chairman of the committee on membership, reported in favor of admitting the following: Drs. R. H. Lounsbury, John V. Woodruff, F. H. Milliner, Amelia F. Dresser, Jacob Miller, C. G. Fisher, Ray H. Johnson and John E. Bacon. The report was adopted and the new members were introduced to the society.

Applications were received from the following, who desired to become members: Drs. Martha F. Caul, Wellington G. Grove, Richard H. Satterlee, J. Grafton Jones, Simon Clug, John R. McCartey, Chester T. Stewart, E. E. Blaauw, F. E. Luke, Henry Osthues, H. C. Rooth, J. Henry Dowd and J. J. Finnerty. Referred to the committee on membership.

Dr. EDWARD CLARK, the treasurer, made his annual report, which showed the following:

Cash on hand December 31, 1894, $287.58; received for dues in 1895, $217; total, $504.58.

The expenditures were $221.95, leaving a balance in the treasury, December 31, 1895, of $282.63.

The report was received and referred to an auditing committee, consisting of Drs. J. J. Walsh and Wm. W. Potter, who reported having found the accounts and vouchers correct, and recommended that the usual sum of $50 each be allowed the secretary and treasurer for their services during the past year. The recommendation was adopted.

A committee on nominations, consisting of Drs. J. B. Coakley, Geo. Abbott, Henry Lapp, Wm. C. Krauss and J. C. Greene, was appointed. They reported in favor of the following, who were thereupon duly elected:

President, Dr. J. G. Thompson, of Angola; vice-president, Dr. Henry R. Hopkins, Buffalo; secretary, Dr. Franklin C. Gram, Buffalo; treasurer, Dr. Edward Clark, Buffalo; censors, Drs. J. B. Coakley, M. Hartwig, Benjamin G. Long, F. S. Metcalfe, Buffalo, and Henry Lapp, Clarence.

Committee on Membership—Drs. G. W. McPherson, T. M. Johnson and H. E. Hayd.

This committee also reported in favor of appointing a special committee, with Dr. Lucien Howe as chairman, to coöperate with similar committees from other bodies, for the purpose of making arrangements for the reception and entertainment of the American Public Health Association, which will meet in Buffalo in September, 1896. This recommendation was adopted and the chair appointed Drs. Lucien Howe, P. W. Van Peyma, Ernest Wende, W. H. Gail and C. C. Frederick.

Dr. J. B. COAKLEY moved that Dr. W. W. Potter be appointed a committee of one to confer with the District Attorney with reference to the medical law, which is at present somewhat ambiguous in its construction, the object being to consider the advisability of so amending it to make its meaning clear. The motion was carried.

Dr. WILLIAM WARREN POTTER offered the following:

Resolved, That Drs. Ernest Wende, Herman Mynter, J. G. Thompson, Henry Lapp and Walter D. Greene be and are hereby appointed a committee to consider the propriety and investigate the feasibility of establishing a professional home for the several medical societies of the County of Erie and the City of Buffalo, this committee to have full power to secure pledges of money or contributions for such a purpose, and to report the result of its labors at the semi-annual meeting in June, 1896.

In support of the resolution, Dr. POTTER said that such a representative body as the physicians of Erie County ought to have a

permanent home, which should be in keeping with the standing of the profession.

He said, further, that he had called attention to this subject in his presidential address three years ago; that though no action yet had been taken, it was by no means a dead letter; that smaller cities than Buffalo enjoyed the benefits of such comforts and that the time had fully arrived, in his judgment, for the medical profession of Erie County to take action in reference to the establishment of a suitable home for itself. The committee, he said, is a representative one and would no doubt decide wisely as to what had better be done. He moved the adoption of the resolution.

The motion was seconded by Dr. COAKLEY and unanimously adopted.

The SECRETARY stated that he had received a communication from Dr. F. C. Curtis, secretary of the medical society of the State of New York, stating that there is some doubt about the incorporation of this society and its ability to maintain a legal action. A law had been passed in 1894—a copy of which was submitted—to remedy similar cases, and he advised the society to take advantage of that law. On motion of Dr. F. S. Crego the entire matter was referred to the president and secretary, with power.

Dr. M. D. MANN read a resolution adopted by the Lake Erie Medical Society, requesting the State Board of Health to appoint a competent physician to investigate the causes and continuation of tuberculosis among the Indians of New York State, especially among those residing on the Cattaraugus Reservation in Erie County. He spoke in favor of indorsing this action, which was done, and the president and secretary were instructed to sign the resolution and forward it to the State Board of Health at Albany.

Dr. GEO. F. COTT read a paper by title on Some unavoidable accidents of intubation. He exhibited the necessary instruments and explained the mode of using them.

Dr. F. C. GRAM then read a paper giving a synopsis of the history of the society for the past seventy-five years. On motion of Dr. Edward Storck he was given a vote of thanks. Dr. J. W. Putnam considered that a paper of such historical importance should be preserved and also distributed among the members. He moved that it be published in the BUFFALO MEDICAL JOURNAL, and that the society order five hundred reprints in pamphlet form for distribution. This motion was adopted, and later the society

added to this all papers of an historical nature read at this anniversary meeting.

Dr. JOHN HAUENSTEIN was received with applause when he stepped on the platform to read a paper on The first uses of chloroform and ether in Buffalo. This was repeated when Dr. Wyckoff presented his paper on The establishment and early days of the Medical Department of the University of Buffalo, and when Dr. John Cronyn read a paper on The establishment of the Medical Department of Niagara University. Dr. Samo's paper on Cholera epidemics in Buffalo was not presented, as the author desired further time in which to complete it. All these papers will be published in full.

Dr. EDWARD STORCK offered the following resolution, and moved its adoption :

Whereas, Medical men are especially interested in the proper management of hospitals, the profession of this county, represented in the Erie County Medical Society, recommends and urges the removal of the Erie County Hospital from political influences, its divorce from the almshouse and its economical and efficient administration by a management qualified for the task.

The resolution brought out a warm discussion, which was participated in by Drs. Porter, Walsh, Pryor, J. C. Greene, Howell, Cronyn, Wyckoff and Storck.

An amendment by Dr. Porter to table the resolution was lost, whereupon Dr. Walsh moved to refer the matter to a special committee of five, to report at the June meeting. Dr. Walsh's amendment was carried. The president stated that he would appoint the committee later.

Shortly after 1 o'clock P. M. the society adjourned.

MEDICAL SOCIETY OF THE COUNTY OF CHAUTAUQUA.

Semi-annual meeting, January 14, 1896.

Reported by C. A. ELLIS, M. D., Secretary.

THE semi-annual meeting of the Medical Society of the County of Chautauqua was held at the Sherman house, Jamestown, Tuesday, January 14, 1896.

The meeting was called to order at 11 o'clock A. M. by the president, Dr. E. S. RICH, of Kennedy. There was a full attendance of members during the sessions.

The program was carried out as published in the January issue of the JOURNAL, except that the paper announced on Criminal abortion, by Dr. James Murphy, of Sherman, was not read, owing to the absence of the author.

Dr. A. D. LAKE, of Gowanda, addressed the society on the subject of Tuberculosis among the Indians on the Cattaraugus reservation. He offered resolutions inviting the State Board of Health to investigate the causes of tuberculosis among the Indians of the State of New York, suggesting the employment of a competent bacteriologist and pathologist to aid in the research. The resolutions were unanimously adopted.

The society next proceeded to consider the recent action of the Board of Supervisors in fixing the fee for the examinations of the insane at $3.00. Resolutions were unanimously passed condemning the action of the Supervisors and establishing the fee for such examination at $10.00, with 25 cents mileage, and declaring it to be dishonorable to perform the service at a lower rate.

A resolution was also passed declaring that the fee for post mortem examinations should be not less than $50.00.

The following named new members were admitted: Honorary—Rev. W. K. Crosby, Falconer. Active—Drs. R. B. Parks, W. H. Hotchkiss, J. M. Brooks and W. D. Wellman, Jamestown; Dr. J. R. Smith, Conewango Valley; and Dr. W. O. Smith, Falconer.

The society instructed the board of censors to vigorously prosecute all persons in the county who may be found engaged in the illegal practice of medicine, and then adjourned.

Progress in Medical Science.

SURGERY.

CONDUCTED BY JOHN PARMENTER, M. D., Buffalo, N. Y.,
Professor of anatomy and adjunct professor of clinical surgery, Medical Department University of Buffalo.

PRURITUS ANI.

ADLER, LEWIS H., JR., (*Philadelphia Polyclinic,*) well summarises an article on the Etiology and symptomatology of pruritus ani, as follows:

Etiology.—The causes of pruritus ani are both local and general. There are many cases affected with this disease, however,

in which we are unable to discover any assignable reason for its existence, and it may then be considered, as stated by Mr. Allingham, as a pure neurosis, being occasioned or greatly aggravated by mental worry or overwork.

Local Causes.—The leucorrheal discharges of women often excite the disease by remaining in contact with the skin of the perineum and developing an eczema. In children especially the disease may result from the presence of oxyuris vermicularis in the rectum. Peduculi or scabies, or the presence of a vegetable parasite, may occasion a pruritus. Improper diet and highly seasoned foods may excite the disease. Hemorrhoids, polypoid growths, fissure or fistula, from the irritation they set up and the abnormal secretion they produce, may occasion pruritus; likewise chronic diarrhea or dysentery may induce the disease. Erythema, herpes and any variety of eczema, whether acute or chronic, may give rise to this affection. Stricture and inflammation of the upper portion of the urethra sometimes occasions itching about the anus. Pruritus frequently depends upon a varicose condition of the veins of the rectum, just as occurs in a similar condition of the veins of the leg. The itching may be due to uterine disorder. In some cases the disease is due to uncleanliness and insufficient ablution of the anus; and, finally, the use of hard or printed substances for detergent purposes may excite a pruritus ani.

General Causes.—Gouty subjects and persons with a more or less marked lithic acid diathesis are predisposed to attacks of pruritus ani. A not infrequent cause of pruritus is derangement of the liver, which may or may not be associated with constipation. Diabetes will often give rise to this disease, as likewise may chronic constipation. Excessive smoking may produce this disorder. The free indulgence in alcoholic liquids, or of coffee, may induce this disease. Excesses at the table, combined with a lack of proper exercise, not only predispose the individual to pruritus, but also may become the exciting cause of the malady. Pruritus has also been ascribed to diseases of the spinal cord and brain.

Symptomatology.—The most prominent and, indeed, the only essential symptom of this disease, is the severe itching. In the majority of cases the irritation is worse at night, especially when the patient gets warm in bed. The intolerable itching renders sleep almost impossible, and when the sufferer does fall off into a fitful slumber he frequently awakes himself by scratching. The

itching is so intense that it is impossible to avoid scratching, which, instead of giving relief, only adds to the trouble.

Nervous and excitable persons are prone to the attacks of pruritus, during the day as well as night; especially is this the case after exercise or on leaving the cold air and coming into a warm room.

In marked cases of pruritus a characteristic condition of the disease is the loss of the natural pigment of the part, and the skin is not supple, but has a peculiarly harsh and rough feel.

A NEW STYPTIC.

Roswell Park (*Medical News*, November 16, 1895,) reviews his experiences with a spray of 5 per cent. solution of antipyrin, made up with sterilised water, as a styptic in surgical operations. He has found it an especially useful measure in parenchymatous oozing which complicated operations. It has been tried by many surgeons and found useful, having no deleterious effects, no matter where it was used. He has since found that a combination of antipyrin and tannic acid is still more useful. This mixture precipitates a thick, gummy cohesive substance, which offers the most ideal styptic for certain purposes. An alcoholic solution of tannic acid is used and antipyrin added in quantity sufficient to form a precipitate of required consistency. This substance is particularly useful in hemorrhage from bone, for instance, in operations upon the cranium. A small piece of sponge or cotton sopped in it may be forced into a bleeding tooth socket, and in many other ways it may be very useful. There is but one attendant difficulty, due to its remarkable cohesiveness, that when the time comes for detachment or separation it is difficult to remove it. Sometimes it has been necessary to wait for the formation of granulations and separation by natural process.

Ross W. Martin (*International Journal of Surgery*, December, 1895,) has a paper on the application of plaster-Paris and its effects, principally in cases of tubercular ostitis, hip-joint diseases and osteomyelitis. He prefers in most cases the plaster-Paris dressing to other mechanical appliances, principally because it can be made to fit more accurately, and thus gives more relief from pain and more certainty as to the position. He gives some very useful directions as to the application of the plaster bandage and how to prevent failures in its application. The plaster must be kept

hermetically sealed to insure prompt setting. He finds that frequently the dressing does not set promptly from other causes than moisture. It may be due to the fact that the crinoline is sized with glue. He finds that glue always interferes with the setting of plaster-Paris, and suggests that by moistening the fingers and handling the material between the thumb and finger one can easily detect by its stickiness whether glue has been used in the preparation. If it has, it becomes useless for dressing. Only starch sizing will answer. The iodine test can also be resorted to. If it is impossible to get a properly sized crinoline, the goods may be washed and thoroughly rinsed in warm water. Washed bandages set quickly, but are more difficult to apply. Another obstacle seems to be the thickness of the thread and mesh work, a very coarse thread absorbing too much water, so that in squeezing it out not sufficient plaster is left in the bandage, and in the course of an hour or so the dressing becomes moist, soft and useless. The best crinoline is the brand known as "A. Virtute." Salt and alum should not be added to the water, because it renders the plaster brittle and so makes a poor support, though it hardens much more rapidly. Another objection is that it becomes more irritating to the skin, often causing excoriations which are difficult to heal. The writer's chief argument for the use of plaster seems to be the fact that it does immobilise and does maintain the parts in the desired position, thus giving certainty and, moreover, much relief of pain. He does not believe that the plaster dressing is productive of atrophy or any special tendency to anchylosis or stiffness of joints, and cites a number of cases to prove it. The easiest and, perhaps, the quickest method of removing a plaster dressing he finds is soaking the surface, which is to be cut with a large pruning knife, with hot, salt water. The paper concludes with the following summary:

Plaster-of-Paris should be dry and kept preferably in tightly sealed cans. Only the meshes of the crinoline should be filled with plaster. Crinoline sized with glue should not be used without having the glue washed out. The bandages should be moistened in lukewarm water without the addition of salt or alum. The excess of water should be removed by even pressure. All bony prominences should be well padded. At other points the dressing should be as nearly skin-fitting as possible. The bandages should be applied evenly and without tension. Each layer of plaster should be thoroughly rubbed by the hands of the operator or his

assistant. These preliminaries being carried out, we reach the following conclusions as regards the advantages of plaster-of-Paris: (1) It gives comfort to the patient; (2) night cries are relieved; (3) it effectually immobilises and retains the parts in the desired position, allowing the patient to move about in bed or even walk around with ease; (4) it does not excoriate when properly applied; (5) it is questionable whether plaster alone ever produces atrophy or pathological changes of the joints; (6) it is neat and easy of application; (7) it is equally applicable to adults and children.

A. VANDER VEER, of Albany, N. Y., (*International Journal of Surgery*, November, 1895,) makes a strong plea for a more uniform and simple classification of appendicitis, citing cases in illustration and concluding as follows:

Let me emphasise—make our classification of appendicitis as simple as possible. I would say, then, we have first, acute perforative appendicitis. Second, catarrhal appendicitis, a condition due to the bacillus communis, possibly to some traumatism, possibly to some foreign substance, relapsing in its character, one or more attacks occurring, with shorter or longer intervals; some cases accompanied with suppuration and abscess, within or without the peritoneal cavity; in some cases attacks resulting in perforation, causing death, very much as do those in the first attack of acute perforative appendicitis. The diagnosis in any event should be made as clearly and distinctly as possible, and the earlier the better. We must overcome the impression that so frequently prevails that a foreign substance causes all the trouble. The bacillus communis is the important factor. Within a period of eighteen months I have done fifteen of these operations for relapsing appendicitis without a death, and have found the appendix in all conditions possible: short, long, obliterated to a mere string, enlarged, elongated and swollen, with adhesions very extensive and embarrassing; in some cases associated with a sinus still discharging from a previous abscess; very few cases presenting a foreign substance—fecal concretion or otherwise.

THE INFLUENCE OF OPERATIVE PROCEDURES IN PERITONEAL TUBERCULOSIS.

HUNTER ROBB (*Cleveland Medical Gazette*,) says the introduction of operative procedures in cases of peritoneal tuberculosis is inter-

esting from a scientific as well as from a practical point of view. Even when it has been decided that operative treatment is beneficial, it is not so easy to decide in what way the good results are brought about. Stchegoleff, in the *Archives de Medicine Experimentale et d' Anatomie Pathologique* of September, 1894, gives a rèsumè of recent literature, dealing with this subject to the following effect: Peritoneal tuberculosis is met with in both adults and children. In the latter, between the ages of three and ten years, boys being more frequently attacked than the girls, except in cases accompanied by ascites, which have often been known to get well spontaneously. The introduction of operative procedures has certainly materially improved the prognosis. The first cases of abdominal section in peritoneal tuberculosis were the result of mistakes in diagnosis. In Osler's collection of ninety-six cases the abdomen was opened thirty times for supposed cysts. In the classical case of Spencer Wells, which is the first instance on record of a tubercular peritonitis cured by operation, the abdomen was opened for an ovarian cyst, whereas an encysted peritonitis was found. Koenig was the first to open the abdomen intentionally for a tubercular peritonitis, and to him belongs the credit of instituting the operation for this disease. The figures given by the different observers as to the result of the operation vary a great deal, but in general are highly satisfactory. The immediate mortality in Koenig's cases was scarcely 3 per cent. Eighty-two per cent. left the hospital in very satisfactory condition, while 65 per cent. may be said to have entirely recovered. Roersch's statistics are less satisfactory, and give only one-fourth as absolutely cured, but many materially improved. These results are questioned because the tubercle bacillus was not demonstrated in all cases. Notwithstanding, however, it is an undoubted fact that many have been cured by laparatomy, in which the tubercle bacilli were found and inoculations produced the disease in animals.

Kichensky, upon making careful experiments with guinea-pigs, found that, of the animals inoculated, those upon which laparatomy was performed survived longer than the others, although all finally succumbed to general tuberculosis. Microscopical examination showed around the tuberculous nodules a development of connective tissue having a fibrous character at the periphery and containing young elements at the center, also round epithelioid cells, and in some cases the connective tissue was so abundant that the tuberculous elements were crowded out and had disappeared.

Gatti, as a result of his experiments, held that the tubercles were resolved, and that the tuberculous peritonitis was cured without the intervention of any active inflammatory process. In an autopsy made four months after a laparatomy, Osler found upon the peritoneum hard granules surrounded by cicatricial tissue, which under the microscope appeared to be fibrous nodules containing some tubercle bacilli and giant cells. He concluded that the tubercles were undergoing a fibrous transformation and that this was the method by which cures were brought about.

Stchegoleff made experiments upon dogs, incidentally discovering that they are by no means as immune or resistant to tuberculosis as has been thought. He inoculated twenty-two dogs, of which ten were operated upon and the remaining left as "controls." All developed characteristic tubercular diseases, but those operated upon survived the "controls" a longer or shorter time, according to how soon they were operated upon. Autopsy showed that the tubercles seen on the peritoneum during the operation had undergone the peculiar fibrous change above noted, while some had entirely disappeared. The degree of retrogression of the tuberculous products varied in the different dogs, according to the time which had elapsed since the operation. The paper concludes with the following summary:

(1) Tuberculous peritonitis in dogs can be cured by laparatomy. (2) Cure is not possible unless the laparatomy is done early. (3) The retrogression of the tuberculous products is brought about principally by inflammatory reaction, which causes infiltration with embryonal cells, phagocytosis and the active development of connective tissue. The specific elements of the tuberculous process are absorbed and we have a fibrous transformation. (4) In connection with the laparatomy certain physical agents help to bring about this curative action. Among these may be reckoned the mechanical trauma which the peritoneum undergoes during the laparatomy, thermic influences, the penetration of air in the abdominal cavity, and perhaps the influence of light. By these agents an irritation is set up, and an inflammatory reaction more or less intense, which is conducive to the arrest ofthe morbid process. (5) Contrary to the opinion of Vierordt, the evacuation of the exudate is not the sole cause of the cure. In the author's cases the best results were found in those instances in which the abdomen contained no fluid. (6) Dogs must be considered as very sensitive to tuberculosis.

STATE MEDICAL EXAMINATIONS.

CONDUCTED BY WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.
Member New York State Medical Examining and Licensing Board.
President National Confederation State Medical Examining and Licensing Boards, 1896.

UNIVERSITY OF THE STATE OF NEW YORK MEDICAL EXAMINATIONS.

EXAMINATIONS for license to practise medicine in this state will be held as follows:

Dates.—1896: January 28–31, April 7–10, May 19–22, June 16–19.

Places.—New York, Albany, Syracuse, Buffalo. Each candidate is notified as to exact place.

Daily Program.—Tuesday, morning, 9.15—12.15, anatomy; afternoon, 1.15—4.15, physiology and hygiene. Wednesday, morning, 9.15—12.15, chemistry; afternoon, 1.15—4.15, surgery. Thursday, morning, 9.15—12.15, obstetrics; afternoon, 1.15—4.15, pathology and diagnosis. Friday, morning, 9.15—12.15, therapeutics.

PROVISIONAL EXECUTIVE COUNCIL.

THE president of the National Confederation of State Medical Examining and Licensing Boards, Dr. William Warren Potter, of Buffalo, has made the following appointments:

To be members of the Provisional Executive Council:

Dr. Hugh M. Taylor, Richmond, Va.

Dr. Perry H. Millard, St. Paul, Minn.

Dr. Joseph M. Mathews, Louisville, Ky.

Dr. William S. Foster, Pittsburgh, Pa.

These men are well known as earnest advocates of reform in methods of medical education and their appointment gives promise of activity on the part of the national organisation. Dr. Taylor was for years president of the Virginia State Medical Examining Board. Dr. Millard held a similar place in the Minnesota Board, and both of these gentlemen were instrumental in framing legislation and administering laws in their respective states that may be classed as models in regard to the practice of medicine. Dr. Mathews is now president of the Kentucky State Board and has been instrumental in bringing about great reforms in the blue grass state, while Dr. Foster, as secretary and executive officer of the Pennsylvania Board, brings a wealth of experience to the Council from the keystone state.

MEDICAL STUDENT CERTIFICATES.

The regents of the University of the State of New York, on November 21, 1895, voted that the examination committee make a report on the requirements in point of preliminary education for medical degrees. After this meeting an amendment to laws of 1895, chap. 661, was drafted to meet, as far as possible, criticisms and suggestions received at that date. This bill was put before a meeting of the executive committee of the regents, held December 17th, and referred with their approval to the legislative committees of the state medical societies. In order, however, to give a better opportunity for suggestions, a copy of these proposed amendments was sent to each medical school and to the men most interested in the provisions for the licensing of physicians. As a result additional suggestions were received, which led to further changes and a second draft was sent out January 2, 1896, embodying these suggestions.

The examination committee has sent out a third draft, revised to meet as far as possible all the criticisms and suggestions which have been offered.

Following is a synopsis of the amendments:

1. Applicants for admission to the licensing examination must have studied medicine not less than three full school years of not less than nine months each, including three satisfactory courses of at least six months each in three different calendar years.

This will permit students to graduate at the close of the third school year without being compelled to wait, as the present law provides, till the expiration of full thirty-six months.

Six months in each year is the minimum term of instruction in the medical school. The law allows a vacation of three months in each year, but each student is to spend the remaining three months in study, either in a medical school or under a preceptor, or in private.

2. New York medical schools and New York medical students shall not be discriminated against by the registration of any medical school out of the state whose minimum graduation standard is less than that fixed by statute for New York medical schools.

3. A medical school may matriculate conditionally a student deficient in one or more subjects of the preliminary education requirement, provided the deficiency be made up before the student

begins the second annual medical course counted toward the degree.

This will enable students to make up entrance conditions and will enable those who come from out of the state for a second course of lectures in New York to meet the preliminary requirement before beginning the second annual medical course counted toward the degree.

4. Students may be allowed to graduate under the conditions which prevailed at the time they began the prescribed study of medicine, without limit as to date of graduation.

5. All medical student certificates granted before this act takes effect may be accepted without limitation as to date of graduation as meeting the preliminary education requirement for degrees.

6. All matriculants after January 1, 1897, must secure forty-eight academic counts or their full equivalent before beginning the first annual medical course counted toward the degree, unless conditionally admitted, when the deficiency must be made up before the student begins the second annual medical course counted toward the degree.

It is considered of great importance that a bill embodying these measures should be introduced in the legislature without delay. A meeting was held at the regents' office at Albany, January 22, 1896, to which all interested were invited, for final consideration of the bill. It now goes to the legislative committees of the state medical societies who have charge of the introduction and conduct of the bill through the legislature.

ENTRANCE REQUIREMENTS OF MISSOURI MEDICAL COLLEGES.

It is announced (*Medical Review*, October 5, 1895,) with much satisfaction that among the minimum requirements of the State Board of Health of Missouri for entering a medical college, recognised by said board, is one which demands the presentation of a diploma of graduation from a good literary and scientific college or high school, or a first grade teacher's certificate. We are also pleased to note that "a college in good standing with the board shall be one in which (other qualifications existing) the course of instruction is a graded one."

By the action of the Missouri State Board of Health a reform in medical education in that state has been inaugurated which has again and again been pointed out and recommended by the best men in the profession, and by men in whom the motive of selfish-

ness is entirely out of the question. The profession, as well as the public in general, will be greatly benefited by the new law.

ENFORCE THE LAW.

Our medical bill (*Atlanta, Ga., Clinic,*) has been in operation now for some months, and its beneficial results are evident even at this early period, but some "*advertising specialists*" are evidently evading its provisions and engaging in their deceptive practices in our midst. The so-called christian scientists, faith healers, hypnotists, etc., of whom this city is now filled, clearly come under the pale of this recent legislation, and should be made to conform rigidly to all the requirements imposed therein. Look after these intruders and make examples of a few of the more prominent ones, and the more insignificant will be held in abeyance and soon the community rid of such nuisances.

THE OREGON MEDICAL PRACTICE ACT.

The law regulating medical practice in Oregon, lately passed, seems to be meeting with some difficulties in its enforcement. The *Medical Sentinel* cites two cases where justice miscarried. One case, that of a Chinaman, who was practising without a license in Portland, was tried three times before conviction could be obtained, and then he was released on payment of a fine of $50. Another case was that of a physician who was arrested for practising in Salem without a license, and he was tried and acquitted.

The difficulty seems to be, as the *Sentinel* truly says, that the people do not understand that these laws are for their own protection, and not for that of physicians. The *Sentinel* concludes a very timely editorial on this subject, as follows:

Every licensed practitioner in the state, as an individual, and the state medical society, as a body, should bring all their influence to bear on having the law complied with, or else find out the reason why it is not.

PRACTICE LAWS IN NEW ENGLAND.

According to Dr. Charles McIntire (*Atlantic Medical Weekly,*) there are but thirteen states (including territories) whose laws at the present time practically permit any one to practise medicine within their borders, and of these New England claims but one,—New Hampshire.

Four states merely exercise a supervision of the diploma held by the person desiring to practise.

Fourteen require an examination, but accept as an equivalent the diploma of certain medical colleges, and of these New England claims Connecticut, Massachusetts, Rhode Island and Vermont.

Maine alone is in the front rank with those states which require in all cases an examination before a licensing board.

AN UNJUST CRITICISM.

THE smart young man who sends "Philadelphia Notes" to the *Journal of the American Medical Association* is responsible for the following attempt to smirch the work of the three-board system in Pennsylvania:

This is the way the results of the work of the state board of Medical Examiners and Licensers appear in the public prints: "The three state medical boards have sent in reports for the last examinations which they conducted. They are: 'Allopathic' Board, 76 examined, 22 failed; 'Homeopathic' Board, 14 examined, 8 failed; 'Eclectic' Board, 1 examined, none failed."—*Public Ledger*, Jan. 7, 1896.

It would certainly appear that the praiseworthy effort to elevate medical standards has thus far resulted in advancing the cause of sectarian medicine and placing scientific practitioners on a par with homeopaths and eclectics. Who are "allopathic" physicians, anyhow?

There are some persons who cannot yet understand that in most of the states the statutes recognise three so-called schools of medicine, namely, one represented by the medical society of the state of ———, one represented by the homeopathic medical society of the state of ———, and one represented by the eclectic medical society of the state of ———.

In order to obtain legislation establishing separate state medical examining and licensing boards in such states, it is necessary to recognise this principle or go without the much-needed reform.

After all, it seems to us that it matters little about the name under which good is accomplished. The fact remains that in the present instance out of ninety-one candidates examined by the three boards, thirty were rejected as incompetent to practise medicine—a long stride toward placing the science of medicine on a sound footing, no matter under what name it was done, and a sufficient answer to the aspersion attempted in the "note" quoted.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

All communications, whether of a literary or business nature, should be addressed to the managing editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

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MEDICAL SOCIETY OF THE COUNTY OF ERIE.

A DIAMOND ANNIVERSARY.

WHEN a medical society has reached an age that enables it to celebrate its seventy-fifth anniversary, the occasion is unusual enough to merit more than passing comment. Though a full account of the proceedings held by the Medical Society of the County of Erie at its annual meeting, January 14, 1896, when it also celebrated its seventy-fifth anniversary, is published in its appropriate place in this issue of the JOURNAL, we feel that befitting remark thereon should be made here.

In the first place, the arrangements for the commemorative part of the meeting were placed in the hands of a committee, consisting of Drs. Lucien Howe, chairman, Charles G. Stockton, P. W. Van Peyma, J. W. Putnam and William H. Gail, that performed its duties in a most satisfactory manner. It was a most appropriate beginning for Dr. Franklin C. Gram, the secretary, to lead off with a historical sketch. His work was gracefully and felicitously done. Dr. Gram succeeded in grouping a vast array of historical material condensed into narrow compass, and he interspersed it with delicious bits of humor that prompted his audience to punctuate the reading with frequent bursts of applause.

When the venerable Dr. John Hauenstein took the rostrum to read his paper on The first uses of chloroform and ether in Buffalo, he was accorded a reception that was as flattering as it was deserved. During the reading of his paper, too, there was frequent applause, especially when mention was made of the men who were prominent in those days.

Following this came Dr. C. C. Wyckoff, with an account of The

establishment and early days of the Medical Department of the University of Buffalo. Here again was a subject of absorbing interest, and Dr. Wyckoff was accorded the just recognition of frequent applause during the presentation of his subject.

Finally, Dr. John Cronyn appeared upon the scene with an account of The establishment of the Medical Department of Niagara University, in which he felicitously told the story of the founding of this college. He, too, was greeted cordially and applauded handsomely.

In response to a circular, requesting photographs and biographical sketches of members, the secretary has received many responses, but is desirous that all who have not already done so shall promptly send to him their pictures and biographies. These will be appropriately filed in albums and volumes specially prepared for the purpose, and will form an interesting historical collection.

A number of members were invited to prepare sketches of medical events in Erie county with which they have been specially identified, and these are also to be carefully preserved for information and future reference. When these papers are all completed and filed with the secretary they will furnish a most interesting, instructive and valuable chapter in the medical history of Western New York.

It was voted at the meeting to publish the papers contributed in the BUFFALO MEDICAL JOURNAL and to print 500 extra copies in pamphlet form for distribution to the members, historical societies, libraries and medical societies in the state of New York.

This society, from its earliest history, has always taken a prominent part in medical affairs. Within its folds have emanated many questions of scientific importance, and it has conceived and carried forward to completion some of the most important legislation on the statute books, of which not the least significant is the present medical practice act, whereby the state exercises control over the right to practise by issuing a license, after due examination, to those who hold legal diplomas. It was fitting that a society with such traditions should commemorate its seventy-fifth anniversary in such a graceful and unostentatious manner.

The society seized upon this auspicious occasion to put in motion the machinery for the establishment of a professional home for its members and which shall include all medical bodies within the borders of the county. A committee was appointed, consist-

ing of Dr. Ernest Wende, chairman; Dr. Herman Mynter, president of the Academy of Medicine; Dr. J. G. Thompson, president of the Medical Society of the County of Erie; Dr. Henry Lapp, of Clarence, and Dr. Walter D. Greene, of Buffalo, which is empowered to consider the feasibility of building a medical club house and the methods of providing ways and means for the same, and is directed to report at the semi-annual meeting in June, 1896. We commend to the medical profession of the county of Erie this most important subject, and bespeak for this representative committee a liberal support in its laborious enterprise.

Finally, the chair was authorised to appoint a committee of five to investigate and report at a subsequent meeting upon the propriety of separating the governing power of the Almshouse and the County Hospital. The president, Dr. J. G. Thompson, subsequently appointed the following-named physicians to serve on this committee: Dr. Edward Storck, chairman, Drs. John J. Walsh, Wm. H. Gail, Henry Lapp and Henry R. Hopkins.

The 14th day of January, 1896, was a red letter day in the annals of the medical profession of Erie county, and the officers and committees of this ancient and honorable society, as well as all others who contributed to make it so interesting, are entitled to the praise and congratulations of the whole community.

TOPICS OF THE MONTH.

THE *Buffalo Morning Express*, our esteemed contemporary, has recently celebrated its semi-centennial anniversary. It was established January 15, 1846, by A. M. Clapp & Co., and has been a daily visitor at the residences of our citizens since that date. It issued a jubilee number January 15, 1896, consisting of fourteen pages, besides a facsimile of its first issue that was printed as a souvenir of the occasion. In the regular issue a number of columns were devoted to the history of the *Express* from its foundation to its golden anniversary.

The first paper was contributed by Hon. A. M. Clapp, of Washington, who for twenty-three years edited and owned the paper in whole or in part. This veteran journalist, still living and enjoying good health in the twilight of life, is a splendid specimen of stalwart manhood and forceful American character. His story of the founding and conduct of the *Express* during its early years is full of absorbing interest, especially to our older inhabitants who are more or less familiar with the events of that period.

This group of historical papers carries the *Express* from its beginning down to the present, tracing it through all the improvements in the printing art that have occurred during the last fifty years. It was the first paper in Buffalo to abandon the old blanket sheet and to adopt the present octavo form. It has kept pace with all other improvements and is now printed on the most modern presses, is set by type machines and is in every way a foremost newspaper.

In the souvenir facsimile the advertisements constitute a curiously interesting study. We learn through them how frequently and rapidly one could go from Buffalo to New York, there being one train a day. Further, that a Wells & Co.'s express messenger was sent out from the office, No. 1 Exchange street, on Saturday of each week for Cleveland, Columbus, Chicago, and othes cities in the West. This messenger was presumably Mr. Fargo himself.

An interesting advertisement relating to the founder and first editor of the JOURNAL we reproduce in full:

☞YOUNG MEN'S ASSOCIATION LECTURES.—Notice is hereby given to the members and the public that an arrangement has been concluded with AUSTIN FLINT, M. D., of this city, in pursuance of which he will deliver a course of Lectures upon Anatomy, illustrated by means of a Mannikin, provided a sufficient number of subscribers can be obtained.

The proceeds of these Lectures will be expended for the purchase of a Mannikin, to be used in illustration of the course, and which is to be retained as the property of the Association.

Teachers of Academies and Public Schools, who may wish to attend these lectures with their pupils, will be supplied with tickets at reduced prices upon application to the Lecture Committee.

Subscriptions will be received at the different Book-stores, and by the Executive Committee of the Association.

☞Single tickets to the course $1. Ticket to admit a Lady and Gentleman $1.50. Family Tickets $2.50.

TH. C. WELCH,
JAS. SHELDON, JR.,
N. K. HOPKINS,
JNO. M. HUTCHINSON,
S. B. HUNT,
Lecture Committee.

Our readers will observe that Dr. Flint was a man of versatile talent, who devoted much of his time to disseminating information among the people.

We venture to offer our congratulations to the *Express*, whose

present owners are easily making it one of the foremost American newspapers. We trust the JOURNAL may enjoy the felicitous opportunity of congratulating the *Express* when it shall celebrate its centennial anniversary.

THE water supply of a great city should ever receive the most jealous care and be kept from even the remotest danger of contamination. Formerly in Buffalo we boasted of the purest and most perfect system; but of late our water supply is open to the suspicion of contamination by sewage. This, to be sure, is denied by many microscopists, who affirm that as yet no organic matter has been discovered containing typhoid or other noxious germs. Be this as it may, the Niagara water is in general so roily as to be offensive to the eye and is not easily disassociated in thought from dirt. This should not be so. It is all very well to direct the inhabitants individually to filter water to be used for drinking purposes, but very few will comply with such advice. The fact is, the city itself should do the filtering and furnish to consumers water not only free from diseased germ contamination but that which presents to the eye a clear and attractive appearance. The more wholesome the water the less beer will be drunk.

CREMATION appears to be growing in favor in this country. According to the *Tribune Almanac* there are twenty-six associations in active operation in the United States. The oldest was organised at Washington, Pa., in 1876, and the two newest were found at New Haven, Conn., and Elizabeth, N. J., in 1894. The number of incinerations is reported as 3,670. The number incinerated in Europe from 1876 to 1893 was 19,700. The membership of the American associations is about 8,000 and the adherents of the method about 100,000.

THE Craig Colony, a home for the epileptics located at Sonyea, Livingston County, N. Y., was opened for the reception of patients Monday, January 20, 1896. It had been determined that the number of patients first to be received should be limited to thirty.

They were taken from the counties of the state pro rata under and by direction of Dr. Charles S. Hoyt, secretary of the State Board of Charities. From time to time other epileptics will be admitted until the limit of the colony accommodations is reached, which is 200.

The formal opening ceremonies will take place in June, 1896. One object in receiving a limited number at first is to employ each at the occupation which suits him best, determined though after a careful examination by the colony physicians. The aim has been to select farmers and gardeners in the first group.

Masons, carpenters, painters and shoemakers will also be received among the first patients. The resources of the land at Sonyea are such that in one year from date it is expected the colony will be self-supporting, so that even from the viewpoint of economy the managers say the scheme is a wise one.

It is expected that in time people of means, impressed by the worthiness of the charity, will liberally endow the colony and its various industrious schools. Villas bearing the names of the donors will doubtless spring up. Some wealthy people also will build cottages for afflicted members of their own families in the parks which abound. It is hoped that the colony physicians and pathologists may some day discover the causes and cure of epilepsy. The object of Craig Colony will, as its managers state, be fourfold: to provide schools where epileptics may attain any degree of education; to provide industrial training of all kinds, there being no vocation which some epileptics may not follow; to give them homes when all other doors are closed against them, and to see that each and every case is carefully studied and treated in accordance with the best scientific methods the world affords.

Applications have been received from foreign countries—Canada, South America, Russia and Asia. Those who have helped to create a sentiment which has resulted in the establishment in this state of possibly the finest colony for epileptics in the world, and those who have aided the establishment in any way will feel some degree of pride in knowing that their efforts have been crowned with great success. The Craig Colony is one of the most philanthropic institutions in this state and in every way commands the respect of a generous and sympathetic people.

The board of managers has made an appeal to all interested to contribute toward the formation of a library for the use of patients. Nearly every one has spare copies of good books—biographies, histories, poetry, fiction, bound volumes of magazines or something suitable for such a purpose. It would add to the value of the collection if each donor should write his or her name upon the fly-leaf of the book. The books or money can be forwarded by mail or express to Dr. William P. Spratling, superintendent, Sonyea,

Livingston County, N. Y., or if from the 8th Judicial district, to Miss Edna Oatman, No. 388 Grant street, Buffalo, N. Y., and correspondence directed to her will be answered if any organisation wishes to know more regarding the wants of the institution. The members of the board of managers from this judicial district are William H. Cuddeback and Leroy S. Oatman, either of whom will gladly give information to any, or will take care of any donations sent to them or to Miss Oatman, as above directed.

SPITTING in public places has become not only an intolerable nuisance, but a menace to health. It is well known that germs from dried sputum mixed with atmospheric air are easily respired, thus making consumption a communicable disease. The Board of Health of the city of New York, it is reported, will soon take action upon a report made by Dr. Hermann M. Biggs, pathologist, and Dr. T. Mitchell Prudden, consulting pathologist, to the board. The report asseverates that it is time to put a stop to the filthy and disgusting practice of spitting on the floors of public buildings and conveyances. The report declares that it has long since been shown that the chief means for the transmission of consumption is the dried and pulverised sputum of persons suffering from this disease. Diphtheria, influenza and other diseases, the report says, are also easily communicated in this way during certain stages of the diseases. Catarrhal affections may be communicated through dried spittle mixed with dust. These germs are likely to be gathered on the feet and on the skirts of women, the report says, and taken into private houses, where the most perfect ventilation will not stay their evil effect.

The report recommends the adoption of the following resolutions:

Resolved, That notices be posted in all public places and in all surface and elevated cars in this city, signed by the Board of Health, warning passengers against expectoration upon the floors of these conveyances, and further, that similar notices be posted in the stations of the elevated roads, warning against expectoration upon the platforms and stairs or on the floors of the stations.

Resolved, That similar notices be posted in the halls and assembly rooms of all municipal and federal buildings in the city.

Resolved, That the municipal authorities be requested to provide sufficient and proper receptacles for expectoration for such public places as are in their control, and that the managers of the elevated roads be

requested to provide similar receptacles sufficient in number for their stations and platforms, and that in all cases these receptacles shall be kept in a cleanly condition.

Resolved, That the officers of the Manhattan elevated road be requested to give peremptory orders to their guards to refrain from, and to prevent so far as possible, expectorations from the trains into the streets, and to secure the enforcement of these orders.

In Buffalo, notices are posted in the street cars requesting passengers not to spit upon the floor, but until conductors are empowered with special police authority to enforce the regulation it is practically a dead letter. We think the time has arrived for the board of health to take such action as will prevent spitting in public places.

THE Consolidated Library of New York, consisting of the Astor, Lenox and Tilden libraries, has secured the services as librarian of Dr. John S. Billings, director of the Department of Hygiene of the University of Pennsylvania. He is considered the best bibliographer in the United States, and as the consolidated library will be the largest in this country, having about 374,000 volumes and property and endowments amounting to about $8,000,000, it is fitting that he should be appointed.

DR. ERNEST WENDE, health commissioner, deserves the thanks not only of every physician but of every respectable citizen for the steps he has taken to prevent the so-called Christian scientists from practising medicine in Buffalo. It is affirmed, in the newspapers, that he intends to invoke all the power that the law arms him with to suppress this dangerous nuisance.

The first practical step made to stamp out this practice was taken Thursday, January 9, 1896, when Dr. Wende and Health Inspector Willard of the health department appeared before the grand jury and gave evidence against Mrs. Carrie Jenner, a so-called Christian scientist, who lives at Black Rock. The health commissioner and his assistants charge her with practising medicine illegally, inasmuch as she has no license to prescribe any medicine, no matter how simple.

It is stated that the district attorney, Mr. Kenefick, is lending all the influence and skill of his office to aid Dr. Wende in his commendable efforts to enforce the law against a class of pretenders, all the more dangerous because they appear so childlike and bland

THE *Post-Graduate*, in its issue for January, makes some pertinent suggestions regarding needed medical legislation. We need not go into the matter in detail, preferring to let the *Post-Graduate*, which is perfectly competent to do so, speak for itself as follows:

We find that the Chairman of the Committee on Legislation of the Medical Society of the State of New York is a member of the Post-Graduate Faculty. He being, therefore, one of our own family, we beg to suggest very plainly to him what ought to be done during the coming winter.

First, the obnoxious law which prevents a doctor from being president of the (New York City) board of health, should be repealed. Second, the anatomy bill, which has passed so many legislatures, and has, under one or another pretext, never reached the Governor, or has been returned, or has been vetoed by him, should be looked after from start to finish. On the first subject, we have no doubt, the *Post-Graduate* is in accord with every member of the profession in the state. We cannot imagine a doctor in medicine, who thinks that his profession ought to be made a subject of special legislation, when that special legislation is to exclude him from a post of honor and influence. It is a reflection upon us as a body which no self-respecting man can condone. One of the best presidents the Board of Health ever had was the late Dr. Willard Parker—indeed, we believe he was its first president.

THE *Comité Franco-Américain*, of Paris, to which we made reference in the January issue of the JOURNAL, concerning the promotion of the interests of American students in France, we learn has made arrangements with La Companie Transatlantique whereby, in accordance with the recommendation of the committee, a reduction of 30 per cent. from the price of the passage between New York and Havre will be made to such American students as propose to study under a faculty in France. Application should be made to M. Paul Melon, 24 place Malesherbes, Paris.

Personal.

DR. WILLIAM PERRY WATSON, of Jersey City, has resigned the secretaryship of the New Jersey state medical examining and licensing board. Dr. Watson also retires from the practice of medicine to accept the medical directorship of a large life insurance company. Dr. Watson will bring great experience to his

new field, but also will be greatly missed in the state examining board. Dr. E. L. B. Godfrey, of Camden, has been elected secretary to fill the vacancy.

Dr. A. C. Abbott, of Philadelphia, first assistant in the laboratory of hygiene at the University of Pennsylvania, by invitation addressed the section for pathology of the Buffalo Academy of Medicine, January 21, 1896, on the Principles of preventive inoculation and serum therapeutics, with considerations concerning their practical application. This paper will be published in an early issue of the Journal.

Mr. George W. Rafter, of Rochester, a member of the state engineering corps, read a paper before the Microscopical club, January 13, 1896, entitled Lake Erie as a water supply for the towns on its borders.

Dr. J. Henry Dowd, of Buffalo, has removed his office from 166 Broadway to 206 Franklin street. His practice is limited to genito-urinary surgery, syphilis and skin diseases. Hours, 9–11; 7–8; Sunday, 2–4.

Dr. George L. Brown, of Buffalo, has removed his office from 121 Franklin street to the D. S. Morgan building, corner of Pearl and Eagle streets. Hours, 9–11; 1–4; Sunday, 10—1.

Dr. Chauncey Pelton Smith, of Buffalo, will read a paper before the Microscopical Club on the Etiology of cancer, February 10, 1896.

Obituary.

Dr. L. Ch. Boisliniere, of St. Louis, died at his home, 3509 Olive street, in that city, January 13, 1896, aged 80 years.

He was born (*Weekly Review*), in 1816 on the Island of Guadaloupe, in the West Indies. At an early age he went to France, and thinking first to make the law his profession, he graduated in law at the University of Paris. He soon began the study of medicine, however, and his interest in the science was so marked that he was made a member of the Anthropological Society of Paris,

and under its auspices spent several months in traveling in South America. He maintained his connection with the Society until his death.

When he returned to this country, in 1846, he brought letters of introduction to Henry Clay, and for some time he made his home in Louisville, Ky. He continued his medical studies and graduated at the St. Louis Medical College in 1848.

In 1870 he was appointed professor of obstetrics at the St. Louis medical college, succeeding Dr. M. M. Pallen.

The degree of doctor of laws was conferred upon him by the same institution in 1879, and at his death he held the position of emeritus professor of obstetrics. He was a frequent contributor to medical journals, and a short time ago he completed a work entitled obstetric accidents, emergencies and operations, which has been adopted as a text-book in a number of medical colleges.

He enjoyed, in a high degree, the respect and admiration of his colleagues, patients and friends, and was universally liked, both socially and professionally.

Dr. Boislinière was a member of the St. Louis medical society, of the gynecological and obstetrical society, and an honorary Fellow of the American association of obstetricians and gynecologists. He leaves a widow, five daughters and a son, the latter a well-known physician in St. Louis.

Dr. Frances Weidman-Hynds, of Brooklyn, died at her residence, 807 Union avenue, in that city, December 5, 1895, after a short illness. She was a graduate of Buffalo University medical college, class of '91, and was for three years afterward resident physician of the Englewood hospital at Englewood, N. J.

Her classmates and many friends in Buffalo will deeply regret to learn of her demise.

Society Meetings.

The Association of Medical officers of the National Guard and Naval Militia held its third annual meeting at the armory of the Tenth Battalion, at Albany, January 15, 1896. Surgeon-General Terry presided and among the medical officers present were: Colonel N. H. Henry, Majors W. E. Lambert, B. S. Beach, Herman

Bendell, A. H. Briggs, F. L. R. Tettaman, W. E. Spencer, Lewis Balch; Captains A. R. Jarrett, C. D. Napier; Lieutenants F. L. Fuchs, H. C. Baun, E. Colton, D. S. Burr, M. C. Ashley, D. C. Dye and R. W. Warner. The various suggestions of the surgeon-general, based on the reports of the committees appointed by him, were debated and measures were adopted looking to the elevation of the medical arm of the guard.

Hospital Notes.

THE Children's Hospital, of Bryant street, Buffalo, was liberally remembered during the holiday season. On New Year's day the sum of $5,000 was received from J. N. Adam for the endowment of a free bed, in memory of his wife, Margaret L. P. Adam. The same day a check for $3,000 was received from Mr. and Mrs. Clarence O. Howard for the endowment of a bed as a memorial to their little daughter Josephine. During the month of December the board received the sum of $3,000 from Mr. and Mrs. George H. Lewis for a free bed in memory of their little son Freddie. The Children's Hospital is now in possession of four endowed beds, which means vast benefit to hosts of helpless children. It is announced that Miss Martha Williams, who has been a staunch friend and liberal supporter of the hospital from the outset, will build an annex on the hospital lot, to be called the Folwell memorial pavilion in memory of the late Dr. Folwell, which will provide increased accommodations for the now overflowing wards.

THE Erie County Hospital medical staff held its annual meeting at the Buffalo Academy of Medicine, Monday evening, January 6, 1896. The following officers were unanimously reëlected for 1896: President, Dr. J. H. Pryor; first vice-president, Dr. William S. Tremaine; second vice-president, Dr. F. Park Lewis; secretary, Dr. Francis Metcalfe.

The following resolution was presented by Drs. Rochester, Lewis and Howell and was unanimously adopted:

We, the members of the medical staff of the Erie County Hospital, in recognition of the self-sacrificing and effective service of the president of the staff, Dr. John H. Pryor, and in evidence of our appreciation of the great work which he has done in advancing that institution

to its present condition, herewith extend to him our sincere thanks and assure him of our hearty coöperation in continuing the work so admirably begun.

Book Reviews.

DISORDERS OF THE SEXUAL ORGANS IN THE MALE. By EUGENE FULLER, M. D., Instructor in Venereal and Genito-urinary Diseases, New York Post-Graduate Medical School. In one very handsome octavo volume of 238 pages, with twenty-five engravings and eight full-page plates. Cloth, $2.00. Philadelphia: Lea Brothers & Co., Publishers. 1895.

Dr. Fuller truly says: "It is remarkable that so little attention and scientific study should have been devoted to investigations upon this subject." He further says, "that the aim of his work is to show that pathological and physiological factors are more commonly the direct causes of sexual disorders, and that the psychological and neurotic reflexes are in the minority."

Sexual disturbances are primarily, at least, and generally, due to causes located in the sexual apparatus.

The first chapter presents a systematic study of the vesico-rectal anatomy, and the text is illustrated with seventeen original and excellent cuts.

The second chapter treats of physiology of the male sexual organs. The functions of the genital anatomy described in chapter I. are grouped under three headings: (1) The passing of the testicular secretion to the seminal vesicles; (2) the temporary storage and production of a preservative fluid needed for the spermatozoa; (3) the expulsion of this compound secretion as occasion requires. Dr. Fuller claims that the passing of the testicular secretion through the vas deferens into the vesicles is due largely to rhythmic action of the ampulla of Henle, and that this enlarged cavity of the vas is not a storehouse for the testicular secretion and is not in the least associated with the seminal vesicles in the act of ejaculation. Fuller contends that the ampulla and the seminal vesicles do not make one common space; that the vas deferens connects with the vesicles by very small opening, at a sharp angle; and through a sphincter or valve-like structure, which closes with the contraction of the vesicle during ejaculation. Further, that it would be impossible for these structures to empty themselves in unison through the ejaculatory duct; that the valvular quality of this passage-way prevents the backward flow of this fluid into the ampulla when the vas is relaxed. Again, the ampulla is too small to cut any figure as a storehouse. The ciliated epithelium undoubtedly plays an important part in passing the testicular secretion through the two feet of vas deferens, but the entire canal

is not lined with ciliated epithelium, as Dr. Ewing has shown that the ampulla is lined with columnar epithelium.

The walls of the ampulla, as shown in the chapter on anatomy, are thickened and muscular trabeculæ line the interior of this cavity. There is surely a pumping, a rhythmic action, of at least this portion of the vas deferens, which carries the testicular secretion onward into the vesicle.

This action is probably induced by the stimulus of the presence of this secretion. The function of the seminal vesicle is the storage and secretion of a preservative menstruum for the spermatozoa as well as the expulsion of the seminal fluid on call.

The vesicular epithelium and that lining the small convoluted canals, which empty into the seminal vesicle, secrete the preservative fluid and this fluid gives to the spermatic secretion its characteristics and peculiar appearance. This fluid is alkaline in reaction. Spermatozoa die immediately in acid media.

Chapter III. gives twenty-eight pages of pathology relating to morbid conditions directly affecting the male sexual function.

The pathology of the prostate is eliminated as its disturbances affect the urinary more decidedly than the sexual function. This chapter treats especially of diseases of the seminal vesicles and of peri-vesicular inflammation.

Chapter V. presents differential diagnosis. Fuller says: "If one will familiarise himself with the clinical features of seminal vesiculitis, there need be but little danger of mistaking this disease.

The diseases which it simulates are prostatitis, cystitis, posterior urethritis, stricture, peritonitis, acute appendicitis, acute epididimitis, kidney colic, and acute inflammation of the rectum.

The treatment of these maladies and many illustrative cases are given in the final chapters of this work.

Disorders of the male sexual organs is an advance upon this special work and should be in the hands of all who are called upon to do genito-urinary practice. B. H. D.

MEDICAL DIAGNOSIS WITH SPECIAL REFERENCE TO PRACTICAL MEDICINE. A Guide to the Knowledge and Discrimination of Diseases. By J. M. DACOSTA, M. D., LL. D., President of the College of Physicians of Philadelphia; Emeritus Professor of Practice of Medicine and of Clinical Medicine at the Jefferson Medical College, Philadelphia; Physician to the Pennsylvania Hospital, etc. Octavo, pp. 1104. Illustrated with engravings on wood. Eighth edition, revised. Philadelphia: J. B. Lippincott Company. 1895.

This treatise on medical diagnosis has been before the profession over thirty years and has now passed through eight editions —an average of one every four years. It has been used as a text-book in nearly every medical college in this country since its first appearance in 1864, hence is well known to teachers, practisers and

students of medicine. It is as nearly a medical classic as any contemporaneous medical literature can ever become.

Though the progress of medicine has been marvelous since DaCosta's first edition was published, during which period methods of diagnosis have been ever changing and advancing toward perfection, yet the author has kept his treatise always abreast of the period, and it is still a trustworthy exponent of the most valuable modern thought in the field of medical diagnosis.

To undertake a systematic review of a treatise so widely and favorably known would be almost a thankless task, since we could hardly expect our readers to give us their patient hearing during such a discourse; but we beg their attention long enough to notice the changes in the new edition. The author has revised the work and altered some of its chapters; he has introduced new matter and has condensed some portions of the old; while he has endeavored to incorporate such bacteriological facts as appear to have been established as valuable for diagnostic purposes. Finally, a number of new wood-cuts have been introduced as well as some temperature charts taken from personally observed cases, all of which contribute to elaborate the text. We think, however, there is still much room for the employment of the engraver's art toward the improvement of this treatise. Da Costa's medical diagnosis will long remain a much-sought book in the libraries of progressive physicians.

THE PATHOLOGY AND SURGICAL TREATMENT OF TUMORS. BY N. SENN, M. D., Ph. D., LL. D., Professor of Practice of Surgery and Clinical Surgery, Rush Medical College; Professor of Surgery, Chicago Polyclinic; Attending Surgeon to Presbyterian Hospital; Surgeon-in-Chief, St. Joseph's Hospital, Chicago. Octavo, pp. 709. Illustrated by 515 engravings, including full-page colored plates. Price, cloth, $6.00; half-morocco, $7.00. Philadelphia: W. B. Saunders, 925 Walnut street. 1895.

This is a volume of some 700 pages, with over 500 illustrations, 100 of which are new and original, while the remainder are carefully selected. Noticeable among them are many admirable reproductions of photographs and photomicrographs, giving with diagramatic drawings a very satisfactory picture of the histological and gross appearances of the various forms of tumors. The work is planned to be a text-book for students as well as a reference book for physicians and surgeons to aid in diagnosis and guide in operations. Some of the more important and difficult operations are fully described and illustrated.

The first section is purely didactic, taking up the anatomy, biology, etiology and pathology of tumors in general with the various methods of treatment. Then follows a chapter on classification, concluding with the author's very simple and sensible arrangement of all tumors into practically four groups: first, those of epiblastic and hypoblastic origin; second, those of mesoblastic

origin; third, the teratomata; and fourth, retention cysts. The latter, however, he does not consider as true tumors.

The individual forms are then taken up separately with diagnosis, prognosis and treatment, thus covering the ground very thoroughly and satisfactorily.

One of the features of the work which makes it especially valuable to the student and general practitioner is the fact that much space is given to the consideration of the clinical distinction between true tumors, inflammatory swellings and retention cysts; as also to the topographical distribution of the various kinds of tumors in the different regions and organs of the body.

Altogether, it is a commendable effort to combine in convenient form information that otherwise would have to be sought for in treatises on pathology and surgery at considerable expense of time, and the author is to be congratulated upon the successful way in which he has accomplished his work. H. A. M.

SUPPLEMENT TO THE INTERNATIONAL ENCYCLOPEDIA OF SURGERY. Edited by JOHN ASHHURST, Jr., M. D., LL. D., Philadelphia. One royal 8vo volume of 1,136 pages, illustrated by numerous wood-engravings and a chromo-lithographic plate. Cloth, $7.50; leather, $8.50. To subscribers to the entire set, cloth, $6; leather, $7, and half-morocco, $8. New York: William Wood & Co. 1895.

The *International Encyclopedia of Surgery* commenced its appearance in 1881, when its first volume bears date, and it is now seven years since the last volume of the series was published. The book consists of fifty-five separate articles, written by as many different authors. The object of this supplementary volume is to fill the gap that has occurred in surgical literature since that time. How satisfactorily this has been done by the issuance of this volume is not easily determined. The aim has been to bring forward each of the original subjects to the present period, thus practically modernising the encyclopedia in order to make it a working guide for the surgeon of today. In some of these branches there has been great change in methods of practice; in others but few, if any, hence the articles are variable in length. One of the most important chapters relates to cerebral surgery and is written by W. W. Keen, and another possessing the keenest interest relates to injuries and diseases of the abdomen by Albert Vander Veer. Another important chapter, the last in the book, relates to the construction and organisation of hospitals by Edward Cowles.

The mechanical execution of the book is all that could be desired and its price is moderate. It is sold by subscription only, hence orders should be placed with the publishers direct or through their authorised agents. To those who possess the preceding volumes this one becomes almost a necessity.

AN AMERICAN TEXT-BOOK OF OBSTETRICS FOR PRACTITIONERS AND STUDENTS. RICHARD C. NORRIS, M. D., Editor, Robert L. Dickinson, Art Editor. Royal 8vo, pp. 1009. With nearly 900 colored and half-tone illustrations. Price, $7.00, cloth; $8.00, sheep; $9.00, half-Russia. Philadelphia: W. B. Saunders, 925 Walnut street. 1895.

It is announced that this work owes its existence to the fact that it seemed practicable to produce a work that should not only embody the teachings of several prominent obstetricians, but should also be a standard teaching work for students and a guide for practitioners. The authors then further announce that they have selected those teachers of obstetrics in several of the leading schools and hospitals of America that possess experience. While this may be true as an abstract fact, we think it will strike many readers of the book, especially those of the widest knowledge of the literature of obstetrics, that some of the authors have been oddly chosen. There are many teachers in the schools of America that are, at least, more experienced and certainly better suited to authorship than some whose names appear on the title page of this treatise.

While there is much opportunity for just criticism of this work, there is yet much in it that merits praise. First of all, the reader is impressed with the excellence of the plates and drawings. Probably no obstetric treatise, certainly none in America, has ever presented such a wealth of artistic illustration as does this one. Moreover, the pictures are, for the most part, anatomically, physiologically and pathologically correct. Too much praise cannot be given to the art editor, Dr. Dickinson, who we understand is willing to be held responsible for the illustrations in all departments.

We do not intend to give an analytical review *seriatim* of this treatise, but simply to speak of features here and there that impress us either as worthy of praise or blame. Next, we may speak of the first and second sections relating to the anatomy of the generative organs and the physiology of pregnancy, both written by George A. Piersol. It is doubtful if these two subjects have ever, heretofore, been as well presented—certainly not in a work on obstetrics. A careful study of these two subjects as here presented ought to afford, even the novitiate, a pretty complete knowledge of them. Nay, more; we may affirm that after such a study of Piersol's presentation of the physiology of pregnancy, there can be no excuse on the part of the student for an imperfect or lax knowledge of the subject. The physiology of labor is another section that will attract the reader as specially deserving of commendation. It is a clear, concise and well-illustrated setting forth of the subject and is written by Robert L. Dickinson. Next, we would commend the section on the mechanism of labor, by Edward Reynolds. Rarely, if ever, has this subject, one so difficult for the student to understand, been treated so clearly, elaborately or adequately. Finally, the section on obstetric surgery, divided into three parts, instrumental opera-

tions by Cameron, manual operations by Dickinson, and celiotomy for sepsis in the child-bearing period by Hirst, invites attention quite as much for its shortcomings as for its merits. In a work of the pretensions of this one it would seem appropriate to invite the most experienced obstetric operators, those of the largest surgical knowledge, to contribute the material for the section on obstetric operations. It should be made so exhaustive as to leave nothing to be desired. In the present instance, while much is commendable, there is yet an incompleteness that challenges remark. This is especially true of the final subdivision. In the first place, the execrable word celiotomy should be expunged from medical literature; it certainly has no place in the present treatise, which should aim to give the best of everything, even in nomenclature. There is one beautiful plate in this section showing diphtheritic endometritis of the puerperal womb, but the section itself can hardly be said to be authoritative on the subject.

It is difficult, it must be admitted, in a work of this kind, to avoid repetition or prevent conflict of opinion, but the editors in this instance have succeeded in reducing these perplexities to a minimum. It has been doubted in some quarters whether another work on obstetrics is needed at this time, and again it has been questioned whether obstetrics is a proper subject for a syndicate of authors to write upon. We do not propose to discuss either of these questions in connection with this book. It is a work of much merit and will easily take its place alongside of the other volumes of the American text-book series; indeed, deserving a place at the head of the list.

BOOKS RECEIVED.

Report of the Commissioner of Education for the year 1892-93. Volume I. Containing Parts I. and II. Washington: Government Printing Office. 1895.

Transactions of the Medical Society of the State of North Carolina. Forty-second annual meeting, held at Goldsboro, N. C., May 14, 15 and 16, 1895. Wilmington, N. C.: Legwin Brothers. 1895.

Transactions of the American Surgical Association. Volume XIII. Edited by De Forest Willard, A. M., Ph. D., M. D., Recorder of the Association. Philadelphia: Printed for the Association and for sale by William J. Dornan. 1895.

Diet in Sickness and Health. By Mrs. Ernest Hart. Formerly Student of the Faculty of Medicine of Paris, and of the London School of Medicine for Women. With an introduction by Sir Henry Thompson, F. R. C. S., M. B., London. Pp. xii.—219. Philadelphia: W. B. Saunders, 925 Walnut Street. 1895.

Therapeutics in Infancy and Childhood. By A. Jacobi, M. D., Clinical Professor of the Diseases of Children in the College of Physicians and Surgeons (Columbia University), New York; President of the

Association of American Physicians; late President of the New York Academy of Medicine and of the Medical Society of the State of New York, etc. Small 8vo, pp. 518. Philadelphia: J. B. Lippincott Co. 1896.

An American Text-Book of Surgery, for Practitioners and Students. By Charles H. Burnett, M. D., Phineas S. Conner, M. D., Frederic S. Dennis, M. D., William W. Keen, M. D., Charles B. Nancrede, M. D., Roswell Park, M. D., Lewis S. Pilcher, M. D., Nicholas Senn, M. D., Francis J. Shepherd, M. D., Lewis A. Stimson, M. D., William Thompson, M. D., J. Collins Warren, M. D., and J. William White, M. D. Edited by William W. Keen, M. D., LL. D., and J. William White, M. D., Ph. D. · Second edition, carefully revised. Illustrated. Imperial 8vo, pp. xiv.—1248. Price, $7.00 cloth; $8.00 sheep and $9.00 half-Russia. Philadelphia: W. B. Saunders, 925 Walnut Street. 1895.

The Functional Examination of the Eye. By J. Herbert Claiborne, Jr., M. D., Adjunct Professor of Ophthalmology in the New York Polyclinic; Instructor in Ophthalmology, College of Physicians and Surgeons, New York; Assistant Surgeon to the New Amsterdam Eye and Ear Hospital; Author of Theory and Practice of the Ophthalmoscope. 100 pages with twenty-one illustrations. Price, $1.00. Philadelphia: The Edwards & Docker Co. 1895.

Diphtheria and its Associates. By Lennox Browne, F. R. C. S., Ed., Senior Surgeon to the Central London Throat, Nose and Ear Hospital, etc. Octavo, pp. xii.—270. Illustrated by the author. Price, $5.00. Philadelphia: J. B. Lippincott Co. 1895.

The American Year-Book of Medicine and Surgery. Being a Yearly Digest of Scientific Progress and Authoritative Opinion in all Branches of Medicine and Surgery drawn from Journals, Monographs and Text-Books of the leading American and Foreign Authors and Investigators. Collected and arranged with Critical Editorial Comments. By J. M. Baldy, M. D., C. H. Burnett, M. D., Archibald Church, M. D., C. F. Clarke, M. D., J. Chalmers DaCosta, M. D., W. A. N. Dorland, M. D., V. P. Gibney, M. D., Homer W. Gibney, M. D., Henry A. Griffin, M. D., John Guitéras, M. D., C. A. Hamann, M. D., H. F. Hansell, M. D., W. A. Hardaway, M. D., T. M. Hardie, B. A., M. B., C. F. Hersman, M. D., B. C. Hirst, M. D., E. Fletcher Ingals, M. D., W. W. Keen, M. D., H. Leffman, M. D., V. H. Norrie, M. D., H. J. Patrick, M. D., William Pepper, M. D., D. Riesman, M. D., Louis Starr, M. D., Alfred Stengel, M. D., G. N. Stewart, M. D., and Thompson S. Westcott, M. D. Under the general editorial charge of George M. Gould, M. D. Profusely illustrated with numerous woo-dcuts in text and thirty-three handsome half-tone and colored plates. Royal 8vo, pp. vi.—1183. Price, $6.50. Philadelphia: W. B. Saunders. 1896.

Literary Notes.

When novelists undertake medical subjects they should be very well coached and the final proof should be read by a doctor. In "Katharine Lauderdale," Marion Crawford makes one of his sub-

jects die of opium poisoning, with widely dilated pupils. It may be that a man can die that way after having taken a fatal dose of opium, but there is no medical authority for the opinion.—*Post-Graduate.*

THE *Medical Fortnightly*, of St. Louis, has issued a handsomely illustrated brochure entitled, The happy medium. The book contains thirty-two pages, incased in a unique embossed cover, and twenty-five half-tone portraits of its staff, including Dr. Frank Parsons Norbury, managing editor; Drs. Hubert Work and T. A. Hopkins, associates; Charles Wood Fassett, secretary, and twenty-one department editors. It is dedicated to friends, patrons and subscribers who are interested in the personnel of the *Fortnightly* staff. It is an agreeable souvenir of an enterprising medical journal.

THE *Cleveland Journal of Medicine* is the name of a new medical journal established in Cleveland by the editors of the *Western Reserve Medical Journal*, which latter retires from the field to give place to this its successor. The new journal is edited and published by Henry S. Upson, M. D., and P. Maxwell Foshay, M. D., the latter being business manager. It is the official organ of the Cleveland Medical Society, and the following-named are associate editors on the part of the society: Wm. H. Humiston, M. D., chairman, 122 Euclid avenue; Wm. F. Brokaw, M. D., secretary of society; W. H. Buechner, M. D.; M. Rosenwasser, M. D.; R. M. Woodward, M. D., M. H. S.; William E. Wirt, M. D., president of society. We congratulate all concerned in the new journal and bespeak for it that success which the importance of Cleveland as a medical center and the high standing of its physicians merit.

THE history of anesthesia and painless surgery is the title of an interesting little brochure which is a reprint of four papers written by Dr. William R. Hayden, of Bedford Springs, Mass., and published in the *International Journal of Surgery*. Dr. Hayden who is a member of the present Massachusetts legislature, is a firm believer in the claims of the friends of Dr. Morton as to the priority of the latter in the discovery of the anesthetic principle. He sets forth his convictions in a clear and convincing manner. It is more than probable that the Massachusetts legislature, during its present session, will take appropriate action toward doing honor to the memory of Dr. Morton. It is stated that the Massachusetts

General Hospital will make a grand demonstration on October 16, 1896, the semi-centennial of the discovery of anesthesia, in which the hospital authorities will be aided by the great body of the medical and dental professions of the state. The price of this little book is 25 cents and it may be obtained by addressing the author.

THE Medical Department of the University of Buffalo has issued a semi-centennial catalogue of its alumni. It is a handsome brochure of forty-four standard octavo pages, printed on book paper, and is a credit to its compiler, who, we presume, is Dr. John Parmenter, though there is nothing in the book to indicate who is its author. Very few colleges are able to present such a catalogue, and it will be prized by the alumni as a valuable record.

OUR good friend, the editor of the *Medical Mirror*, in the issue of his estimable journal for December, 1895, has placed us under renewed obligations by his kindly words and wishes, for which we beg him to accept our best thanks. Here is what Dr. Love says:

We congratulate Dr. William Warren Potter and his associate editors upon the new dress of the BUFFALO MEDICAL JOURNAL. Good taste, solidity and worth appears throughout the pages. This journal, unlike many others, is not satisfied with the fact that it was founded by one of the masters of the medical profession of America and with a creditable record of more than fifty years, but makes constant effort to keep in the front rank. The national prominence of Dr. Potter as president of the American Association of State Board Medical Examiners and as one of the wheel-horses of the medical profession in New York state, cannot fail to be of immense value to the BUFFALO MEDICAL JOURNAL.

We should be glad to see every doctor in America a subscriber and every advertiser represented in the advertising columns.

Popular Science, a journal of news, invention, botany, chemistry, medicine and the like, appeared in an enlarged and improved form in January, 1896, which was its thirtieth anniversary issue. New departments on invention and electricity have been added, each under the direction of an expert. The number of pages also have been doubled. We congratulate this excellent journal on its handsome and prosperous appearance.

THE *Journal of Experimental Medicine* was announced to appear in January, 1896. It is stated that at least four numbers will be

published during the year; at all events, whenever sufficient material, is ready a number of the journal will be issued. It will be devoted to original investigations in physiology, pathology, bacteriology, pharmacology, physiological chemistry, hygiene and medicine. Dr. William H. Welch, 935 St. Paul street, Baltimore, professor of pathology in the Johns Hopkins University, is to be the editor of the new journal and with him will coöperate a board of twelve associate editors, with whom a large number of medical gentlemen have consented to assist as collaborators. The subscription price will be $5.00 a volume. D. Appleton & Co., New York, are its publishers.

THE *Medical News* is now published in New York instead of Philadelphia. Nothing now could surprise us unless the *American Journal of Medical Sciences* should run over to Chicago and take up its abode. We have been accustomed for so many years to associate the *News* with Philadelphia that it seems awkward to readjust our mental geography and place it in New York. It will seem odd, too, to separate Dr. Gould's name from the editorial tripod of the *News*; but we suppose we may as well accustom ourselves to the change first as last, so in bidding good-bye to Dr. Gould, we extend a cordial welcome to Dr. Goffe.

THE *Times and Register*, not to be outdone by its migratory Philadelphia contemporaries, hies itself off to Boston, where it is to be edited, though it will still be published, or rather printed, in Philadelphia. It henceforth will appear bi-weekly—twenty-six times a year.

Miscellany.

MESSRS. PARKE, DAVIS & Co., the well-known manufacturing chemists, of Detroit, have issued a handsome calendar, which has for its design a pet cat evidently suffering from a big head after a night out. Its head is tied up in a bandage and one eye is swollen shut. On a table by the side of its couch are some of the medicines manufactured by this celebrated firm. "Oh! Uncle John, isn't this fun?"

THE Antikamnia Chemical Company, of St. Louis, has sent out to its patrons and friends a convenient pocket banknote folder, and our thanks are due to this well-known house for one of these pocket-books. We shall try to think of antikamnia every time we file away a banknote.

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Original Communications.

THE PRINCIPLES OF PREVENTIVE INOCULATION AND SERUM THERAPEUTICS, WITH CONSIDERATIONS CONCERNING THEIR PRACTICAL APPLICATION.[1]

By A. C. ABBOTT, M. D., Philadelphhia,

First Assistant, Laboratory of Hygiene, University of Pennsylvania.

THE topic on which I have the honor to address you this evening is one that has, by reason of its importance, claimed a great deal of attention from scientific medical men during the past few years.

When it was suggested that I take as the text of my remarks the practical outlook of the results of recent investigations along the lines of protective vaccination and serum therapeutics, I acquiesced with pleasure, as this theme would give us an opportunity of discussing together the outcome of work the underlying principles of which are, I believe, destined to ultimately place the prevention and treatment of disease on a higher scientific plane than they have ever before occupied. In making this prediction, I am fully aware of the risk that is taken,—a risk that may indeed appear to be unjustifiable when viewed in the light of the limited number of instances in which the possibilities of the successful employment, in human beings, of preventive vaccination and serum therapeutics have been demonstrated. But, while these successful demonstrations have been few in number, we must keep before us the fact that their underlying principles have rested upon a foundation firmly grounded in unimpeachable experimental proof, and are capable, we believe, of further elaboration and wider application.

For a period extending over more than the first half of the present century the single instance of an effort to imitate a method

1. An address delivered before the Section for Pathology of the Academy of Medicine of Buffalo, N. Y., January 21, 1896.

of nature in affording immunity to infectious maladies was the practice of protective inoculation and vaccination against small-pox. Prior to the introduction of vaccination by Jenner it had been observed that after recovery from a mild attack of an affection known as cow-pox, that simulates in certain of its details, though considerably modified in degree, the disease small-pox, the individuals so affected were henceforth, in most instances, proof against the ravages of small-pox. It had also been noticed, and is still a constant observation, that a single nonfatal attack of certain forms of infection often leaves the patient proof against subsequent inroads of the same malady. It was observations of this character that induced the query respecting the cause of the phenomena, and though the riddle is not as yet by any means solved, still, during the past decade and a half, so much light has been shed upon the manifold sides of the question through accurate, laborious, fundamental research, that we are at present tolerably sanguine as to the ultimate outcome.

In the early days of studies in this field, the ideas that were advanced in explanation of immunity and susceptibility belonged very largely to the realm of the hypothetical. They were without foundation in truth and when tried in the balance of experimental test were found to be sadly wanting. From the time of Jenner's demonstration, in 1798, to the effect that it was possible to protect human beings against small-pox by vaccination with the lymph obtained from the cow-pox vesicle, a phenomenon of which we know little more now than he did then, up to 1880, nothing was contributed to our knowledge of the subject. In 1880, in the course of his studies upon the cholera of chickens, Pasteur showed, for the first time, that by artificial means it was possible to so modify the virulence of the bacteria causing this disease that they would no longer produce fatal results, but, instead, only temporary local disturbances, and that in these cases the chickens that had recovered from such a modified attack were not now susceptible to the inroads of the highly virulent bacteria that cause the fatal form of the infection.

In view of the fact that at about the same date (1878–'81) Pasteur, Koch, Toussaint and others had shown the rod-shaped organisms discovered by Pollender (1855) and by Davaine (1863) in the blood of animals dead of anthrax to be the etiological factors concerned in this disease, it is not surprising to find the observations of Pasteur utilised in a scheme for the production of a vaccine

against this much dreaded disease. Without entering into technical details, it will suffice to say that as a result of numerous trials by different experimenters, it was ultimately demonstrated that by the employment of various agencies, thermal and chemical, drying and prolonged cultivation under particular artificial circumstances, it was possible to do to the virulent anthrax bacillus just what Pasteur had done to the bacillus of chicken cholera—namely, to so attenuate its virulence that it no longer killed susceptible animals, but caused instead only temporary disturbances from which the animals recovered. With recovery they were usually found to be no longer susceptible to the more severe, commonly fatal, form of the infection. We can justly say that it was in the course of these studies on anthrax that the foundation stones were laid for our knowledge of protective vaccination with attenuated living virus.

Of fundamental importance to our understanding of the processes of immunity is the fact that the constitutional symptoms and pathological lesions of disease are the results of the toxic activities of metabolic products of the bacteria concerned in the production of disease, and that immunity, as well as disease, is established by these substances, not alone when elaborated within the tissues of the animal to which the bacteria have gained access, but also when they are produced under artificial conditions and purposely introduced into susceptible animals.

An advance of great importance was made in our knowledge of immunity through the application of this fact by Salmon and Smith.[2] They demonstrated that a certain sort of immunity to particular forms of infection might be conferred upon animals by injecting into them the filtered, germ-free products of growth of certain bacteria to the pathogenic influences of which the species of animal under treatment was highly susceptible.

This demonstration of the possibility of inducing immunity through purely chemical, or biologico-chemical, means shed an entirely new light on the subject, though its true significance was not at the time, apparently, either understood or appreciated. As a result of numerous investigations suggested by this discovery of Salmon and Smith, immunity is today held by a number of those who have had most to do with the elaboration of our knowledge of it as a purely chemical phenomenon, a phenomenon that involves not the microörganisms themselves that are concerned in the production of disease, but rather the agencies through which they produce it—namely, their poisons.

As a result of very recent investigations this does not seem to be a safe generalisation, for evidence has been produced that leads us to believe that in particular cases the protecting substances in the body of the immunified animal possess in fact a much more conspicuous germicidal than antitoxic activity, and at times these two peculiarities appear to be in a measure coincident. (See 9 and 15 of bibliography.)

With the preceding observations as a base of operation, it is not surprising that many scientific men yielded to the temptation to investigate the manifold problems presented by this fascinating and at the same time almost unexplored field.

With the advent of modern bacteriological methods and their application to the study of the various forms of infection, our knowledge of the causation of these diseases rapidly became enriched. As in the majority of cases the factors concerned in the production of infection were shown to be bacterial in their nature, efforts were from time to time made to determine if the particular species of bacteria that had been isolated from particular forms of disease, and reasonably shown to stand in causal relation to them, could be made to respond to such treatment as had been employed in the preparation of vaccines against anthrax and against chicken cholera; or if the products of growth of these bacteria were potent to afford immunity to animals into which they, devoid of the bacteria by which they had been formed, were injected. Neither failure nor success was the uniform outcome of these experiments. From every aspect, however, this field of work gave promise of being most fruitful, and no thought of discouragement was entertained; indeed, the interest in the subject grew with tremendous strides, and among those who were and still are foremost with investigations in this particular line and its correlated branches may be numbered many of the most brilliant scientific minds of the day.

Without attempting to bring to your notice the experimental details of the work that has brought our knowledge of immunity to the point it now occupies, or to elucidate many of the interesting collateral phases of the subject, I shall occupy the time that remains with a consideration of those features that will, I believe, serve as the most striking illustrations of the lines along which the work has developed and which may also be taken as indices of the direction in which these studies will subsequently be pursued.

As a result of numerous observations we now know that immunity may be (1) natural, *i. e.*, certain races, certain species, certain indi-

viduals may from birth be wholly or in part insusceptible to forms of infection to which other races, species or individuals may fall victim. (2) Immunity may be acquired through natural channels, if such a term may be applied to the contraction of and recovery from disease as observed in the ordinary course of life. The acquisition of immunity through this means is, as you know, always more or less uncertain. To a number of those infected in the ordinary way the disease proves fatal; a certain number of the remainder are subject to recurrence of the disease, while a fair proportion are seen to have acquired a condition of body through which they are protected against subsequent attacks. (3) Immunity may be artificially produced, viz., by purposely inducing a very mild form of the disease by inoculation with vaccines that have been made by depriving the virulent bacteria of a portion of their pathogenic power; also by inoculation with infinitesimally small amounts of fully virulent virus, a plan that often results in the production of only a temporary constitutional disturbance that may be sufficient, however, to subsequently protect the animal under treatment; also by the induction of a condition of tolerance to the poisons of specific, virulent bacteria, either the poisons produced by the bacteria as products of their nutrition when grown under artificial circumstances, or the poisons obtained by particular methods from the protoplasmic bodies of the bacteria themselves, or both together. In this plan the germ-free poisons in their full degree of toxicity may be employed after having been highly diluted, or they may be modified by particular chemical or thermal treatment until robbed of much of their original potency. Lastly under this head, immunity may be conferred upon an animal by the injection into it of the serum of the blood of another animal previously immunified against the disease, and immunity may also be conferred to the nursing young through the milk of an immunified mother.

As a rule, in the artificial production of immunity, no sharp lines are drawn between the several preceding methods of work, but more often the plan adopted partakes of the nature of two or more of these schemes combined. Against a given disease several methods of inducing immunity may often be successful.

When by either of the foregoing plans an animal is robbed of its susceptibility to a particular form of disease, it is undoubtedly a most impressive result; but this is, to those engaged in the purely scientific study of the subject, of far less interest than the intimate nature of the phenomenon, the "why and the wherefore"

of it, so to speak. It is this curiosity of science that has induced so many brilliant medical minds of modern times to endeavor to solve this complicated problem, and it is through these efforts that our general knowledge of important vital functions of the animal economy has been greatly extended and enriched.

With the opening of this hitherto closed book by Pasteur and his pupils, it is not surprising that the importance and true meaning of its first pages should have been misinterpreted, and that hypotheses should have been advanced in explanation of the phenomena that were not sufficiently grounded in experimental proof to withstand the test of further investigation. Thus, for instance, Pasteur[3] expressed the opinion that immunity seen to follow a non-fatal attack of infection was due to abstraction from the tissues of materials necessary to the growth of the bacteria that caused the infection, and in this way the individual no longer offered conditions capable of supporting the life of this particular species of bacteria. Chauveau[4] believed acquired immunity to be due to the deposition within the body, during the primary attack, of substances that are detrimental to the growth of the species of bacteria concerned in that attack should they subsequently gain access. In the light of modern experiment these speculations have little more than historic interest.

Of a great deal more than historic interest, however, were the observations of Metchnikoff[5] (1884) that induced him to advance his theory of phagocytosis, in explanation of the intimate nature of the vital phenomena that are in operation during the efforts of the body to resist the invasion of pathogenic microörganisms. This most fascinating hypothesis was based upon the fact that certain wandering cells of the animal economy possess the property of taking up and digesting within their protoplasmic body many foreign particles with which they come in contact. It was the belief of Metchnikoff that bacteria were in this way taken up and digested by these wandering cells, and that in the performance of this function the amoeboid cells served as actual sentries and scavengers of the body. He believed that by the processes of inducing immunity the efficiency of the weapons of defense possessed by the wandering cells was increased to a point at which they were enabled to overcome and destroy disease-producing bacteria to which they would otherwise have fallen victim.

A severe blow was given to this idea by the elaborators of the humoral doctrine of immunity. Through the investigations of

v. Fodor,[6] Nuttall,[7] Behring[8] and many others, the important fact was demonstrated that certain fluids of the body, especially the serum of the blood, are capable of destroying large numbers of bacteria, even when deprived of their cellular elements. It was demonstrated that this was not a property peculiar to the blood of naturally or artificially immunified animals, but was possessed to a varying degree, toward particular species of bacteria, by the blood of practically all animals. Contrary to what might have been anticipated, it was found that when drawn from the body the blood of certain animals that are markedly susceptible to particular forms of infection possessed a relatively high degree of germicidal activity toward the bacteria causing such infections; whereas, on the other hand, the serum of the blood of certain other animals that are more or less naturally immune to these infections may be comparatively feeble in germicidal properties. In a single conspicuous instance it has been possible to reasonably refer the condition of natural immunity of an animal to the composition of its blood, but this represents an exceptional observation that is not generally applicable. I refer to the studies of Behring[8] upon the immunity of the rat to anthrax, where the natural immunity of the animal to this disease is attributed to the high degree of alkalinity of its blood. In other instances the germicidal properties of the serum have been seen to increase after the establishment of a condition of artificial immunity ([9] and [15]).

Thus, step by step, the field was gradually contracted, and the question of prime importance now became that concerning the element or elements in the blood to which this remarkable germicidal activity could be attributed.

The details of the manifold chemical studies that were at once undertaken upon the blood, the tissues and other fluids and secretions of the body hardly come within the scope of a paper of this character. It will suffice to say that it was through studies projected along these lines that discoveries were made that are destined to be of the greatest importance in the elucidation of the subject.

Among the first of the important discoveries that were made upon the composition of the blood as regards its germicidal function was that of Buchner.[10] He demonstrated that the power possessed by the serum of the blood of rendering bacteria inert was a property peculiar to a living protoplasm dissolved in the serum, and that this body could be robbed of its germicidal prop-

erties by depriving it of certain of its salts by dyalisis, by excessive dilution, by moderately high temperatures and by other detrimental influences. For this or these germicidal proteids Buchner suggests the name "alexines."

It was subsequently demonstrated that if the poisonous products of growth of certain pathogenic bacteria be introduced into the body of a susceptible animal in nonfatal doses, or in a condition of diminished toxicity, that the effect of such treatment is exhibited by a more or less pronounced constitutional reaction on the part of the animal. After recovery from this temporary disturbance, the animal is often found to be not only insusceptible to infection by the bacteria by which the poison was manufactured, but the serum of its blood in certain cases has undergone a demonstrable change: it has acquired the property of neutralising the fully virulent poisons, though its property of destroying the bacteria themselves may not in all cases have been conspicuously altered. In other words, in the process of acquiring immunity the chemical composition of the blood is modified ; it is enriched by the addition to it, through changes in the body, of a substance that is antidotal to the poisonous products of the pathogenic bacteria against which the animal is immunified, without its relation to the bacteria themselves having been in all cases materially changed.

In this connection, it is important to note that it is possible by the repeated injections of nonfatal but gradually increasing doses of toxins into susceptible animals to finally increase the antitoxic value of the blood of that animal to a degree far in excess of that ever seen to exist in immunity acquired through an ordinary attack of disease, or the immunity that is induced simply as a prevention against bacterial invasion. It is in this way that antitoxic serums are obtained that are of sufficient strength, that is, contain sufficient amount of the antidote to be of service in the treatment of disease already in progress, a condition necessitating the neutralisation of large amounts of poison circulating in the body as speedily as possible with the greatest amount of antidote concentrated in the smallest bulk of the curative agent.

In the course of earlier investigations upon the subject, Buchner[11] offered the suggestion that the immunity conferred by a single attack of disease exists by reason of certain "*reactive changes*" that occur in the tissues during the disease, and that with the establishment of this alteration the animal acquires insusceptibility to further attacks of the same malady. Though much has been

done on the subject since this hypothesis was advanced, we are today but little nearer the actual solution of the problem than that which is embodied in this view.

The opinion now generally held is that the tissues acquire, during the constitutional reaction coincident with the primary attack of the disease the property of generating the antidotal substance, though it is also believed, especially by Buchner, that the antidotal or antitoxic body is in some cases the poisonous products themselves of the bacteria so modified through the reaction of the tissues that they now possess protective, neutralising or antitoxic peculiarities. On these points, however, it is as yet impossible to speak with certainty.

The observation that the serum of the blood of a susceptible animal could be rendered antidotal to certain bacterial poisons by the gradual introduction into the animal of the poisons until a condition of tolerance was reached, together with the discovery that a certain group of highly pathogenic bacteria produce their effects, almost if not entirely, through poisons that they produce within the system, while they themselves are localised to some particular point within or upon the body, suggested a line of experiments having for their object the practical application of these observations to the treatment of disease resulting from the activities of what may be termed the truly *toxic* pathogenic bacteria. It was in the course of these investigations that Behring and Kitasato[12] made the important discovery that the serum of the blood of animals rendered tolerant to certain bacterial toxins not only afforded protection to these animals against the poisonous effects of these substances through antidotal properties, but that by the transference of serum from this immunified animal to another susceptible animal, that immunity was at once conferred upon the animal into which such serum had been injected. The original observation was made in the course of studies upon tetanus.

It was not long, however, before the principles upon which this observation rested were applied to the study of other forms of toxic infection with, as you know, the result of placing in our hands, through the labors of Behring and his associates, an agent whose favorable influence upon the course of the diphtheritic infection is seen to be so pronounced as to justify the opinion that with the introduction of the antitoxic serum in the treatment of diphtheria, an epoch has been marked in the history of medicine.

By some the method of inducing and transferring immunity, as

elaborated by Behring and his colleagues, is considered as only the induction of a condition of tolerance to chemical poisons, *i. e.*, the rendering of an animal poison-proof (Giftfest), and not as a protection to bacterial infection. There is evidence, however, to indicate that this view is erroneous, and that the method is applicable in certain cases of true infection that are not characterised by marked toxic features.[13]

In the present state of our knowledge, it is impossible to say to what extent acquired immunity in human beings is due to the presence of antitoxic substances in the circulating fluids, or to indicate in how far the observations that have been made upon tetanus and diphtheria are applicable to other infections; certainly, in so far as the truly toxic infections are concerned, one is constrained to feel sanguine as to the ultimate outcome of the further application of the principles on which the antitoxic method of treatment is based. As a precautionary measure, however, it may not be amiss to emphasise the impropriety of generalising from these single instances. We must bear in mind that the conclusions reached with regard to tetanus in animals, and diphtheria in man, are the results of observations having an incontestable experimental basis, without which any pseudo-scientific structure that we may rear through analogical reasoning will, sooner or later, totter and fall without a moment's warning. The wider application of these principles to the treatment of disease is only to succeed through the establishment of a firm basis of experimental proof for each separate and distinct affection. From this it is clear to those of you who are familiar with laboratory methods that there are many obstacles to be overcome, some of them, in our present position, almost insurmountable. The impossibility of faithfully reproducing in animals that we use for experiment some of the most important diseases to which human beings are liable, may serve as an example of one of the gravest of these difficulties.

From what has preceded, we observe that we must distinguish between three principal methods of inducing immunity—namely, by the activities of living bacteria in the tissues; through the introduction into the body of the germ-free, poisonous products of bacteria; and through the introduction into susceptible animals of the serum of the blood (and of other secretions) from another animal already immunified.

By either the first or second of these procedures the condition of immunity is established only after the lapse of the time necessary

for the elaboration of the immunifying substances within the tissues; whereas, by the last method these substances that have already been prepared in the immuned animal from which the serum is obtained are transferred directly, and the animal receiving them is at once protected; as Ehrlich[14] conceives it, one simply transfers the protecting agent from one animal to another.

There is a further distinction as regards the results of these methods of procedure. The immunity that is induced through vaccination with attenuated virus, or conferred by the gradual introduction of toxins to the point of tolerance, simulates more closely in the degree of its permanence the immunity usually conferred by a nonfatal attack of infection contracted in the ordinary walks of life than does that produced by the injection of the serum of immunified animals.

Ehrlich[14] proposes to designate the more or less permanent immunity frequently conferred by an attack of an infectious disease as "active immunity," while for the immunity that is established through the direct transference of the immunising agent from the blood of one animal to the tissues of another he employs the name "passive immunity." This designation is not acceptable to all writers on the subject, the objection being that there is not as yet sufficient proof that the induction of "passive immunity" is as simple a matter as Ehrlich conceives it to be. There is some evidence in support of the idea that the real immunifying agent may not be contained in the immunifying serum, but that this serum is only instrumental in inducing the peculiar tissue reaction that results in the formation of the actual protecting body.

Another point in connection with this subject, on which there has been considerable controversy, is that concerning the specificity of the relation between the immunity inducing toxins and the antitoxic substances elaborated in the body as a protection against them. By the majority of investigators there is believed to be a specific antagonism between the poisons produced by a given infectious microörganism and the protective agent that is present in the body of the animal artificially immunified against this particular microörganism. Objections have been raised to accepting this as a law, on the grounds that the serum of artificially immunified animals is sometimes seen to possess protective properties, to a limited extent, against forms of infection or intoxication other than that against which the animal has been immuni-

fied. In this connection, it must be remembered that the *normal* serum of man, of horses, and occasionally of other animals, has also at times been observed to possess similar "*general*" antitoxic peculiarities. It may be that the observations on which are based the objections to the idea of a specific relation between particular toxins and their antitoxins can be explained through this normally present, universal, so to speak, antidote.

In a number of experiments, antitoxic properties of the serum against specific bacterial poisons have been induced through the induction of tolerance to the poisons of bacteria of a different species. This condition appears, however, to be little more than an accentuation of the normally present protective agent already referred to. It has never been possible to bring about in this manner as high or as permanent a degree of immunity against a particular disease as that which can be obtained by the use of the microörganism causing the disease, or the products of its growth.

Of fundamental importance in their bearing upon this subject are the remarkable observations of Pfeiffer.[15] He showed that it was easily possible to confer upon guinea-pigs a condition of immunity to Asiatic cholera by the repeated injections into them of sterilised cultures of the organism causing the disease. If upon the establishment of immunity he now injected into the peritoneal cavity of these animals an amount of the living culture that would otherwise certainly prove fatal, not only had this no effect, but within a few minutes, almost instantly, there was an actual disintegration of the organisms injected that could readily be followed with the microscope. He demonstrated, further, that this relation between the immune animal and the organisms against which it was protected was a specific one, and that no such disintegration occurred when other bacteria were injected. If, with the cholera spirillum other bacteria were injected, *only* the cholera spirillum was thus broken up. He showed, in addition, that while the serum of the blood of the immune animal was capable of conferring immunity to Asiatic cholera upon other animals not immune, it had no disintegrating effect upon the cholera spirillum when in contact with it in the test-tube, but if he injected into the peritoneal cavity of a nonimmunified guinea-pig the fatal dose of living cholera spirillum, and followed this immediately by an intraperitoneal injection of the serum from an immune animal, *at once* the disintegration of the bacteria within the peritoneal cavity was to be detected.

It will be seen that these investigations are of importance, not alone as regards the question of specificity, but also as regards the nature and origin of the protecting body, for we have here a serum from an immune animal capable of conferring immunity; capable, when injected into the susceptible animal, of endowing it with the peculiar germicidal function noted in the immune animal from which the serum originated, but still, totally incapable of this remarkable bactericidal activity when tested outside the animal body. Manifestly the real protective agent is generated by the tissues as a result of the specific irritation of a something contained in this serum.

We must remember, however, that our knowledge on this subject does not as yet admit of the laying down of hard and fast laws, and it is not unlikely that much of what we consider as sound today may tomorrow prove to be untrustworthy. We are in many respects hardly more than on the threshold of this many-sided subject.

Equal in interest and importance to any of the other problems relating to the question of acquired immunity, is that concerning its transmissibility from parent to offspring. Can the condition of immunity to particular infections and intoxications be inherited?

While there have arisen from time to time examples that serve to indicate the possibility of this question being answered in the affirmative, we are indebted to Ehrlich[14] for the experimental demonstration of the accuracy of these indications. In the course of a series of studies upon the vegetable toxalbumens, abrin, ricin and robin, especially as regards their intoxicating effects upon animals, and the methods of inducing immunity to them, he demonstrated the possibility of easily inducing in white mice, normally markedly susceptible to these poisons, a condition of resistance that enabled them to withstand large multiples of the otherwise fatal dose. He likewise conclusively demonstrated that females on whom such immunity had been conferred transmitted, through the milk, to their nursing young, an antitoxic substance that induced in them a condition of body through which they, too, were enabled to resist the otherwise fatal dose of the particular poison against which the mother was immunified. This transmission of immunity appears to be entirely a maternal function, the father, in Ehrlich's experiments, playing no part in the process.

From the preceding considerations of the subject, we see that a condition of immunity against certain forms of infection may be

more or less easily acquired, and that when once acquired is to a varying degree transmissible to the offspring of the individuals who have experienced this modification.

In the light of these established facts, one might be tempted to consider the natural immunity seen to be possessed by certain individuals and races to particular forms of disease as, after all, an acquired trait,—acquired not as a result of the purposeful inoculation of progenitors with modified virus or attenuated toxins, but rather acquired through the processes of survival and hereditary transmission. For instance, one might argue: when a given number of individuals become affected with the same form of infection, those that survive are manifestly not only less susceptible to its inroads than were those that succumbed, but, as we have seen, the degree of this insusceptibility is further increased by the attack of the disease through which they have safely passed. These survivors, it might be claimed, transmit to their offspring not only certain mental and structural characteristics, but physiological peculiarities as well, among which may be a condition of insusceptibility to this particular form of infection that has been accentuated at the nursing period through the protecting influences of the milk of an immune mother. Still, in support of this view one might continue: the constant presence in a community of a certain form of disease is ultimately accompanied by a diminution of its virulence and a lower degree of fatality from it than is seen to follow its first or only occasional appearance, and that continuous exposure, therefore, of large numbers of individuals to particular diseases may result, through the natural phenomena of survival and inheritance, in developing a race endowed with natural insusceptibility to this malady.

Plausible and attractive as this view may appear on superficial examination, there are objections to its adoption.

In the strict sense of the word, and in the light of present knowledge, we must regard natural immunity as a trait that has been transmitted, and is further transmissible, through generations by parents in whom it is blastogenic. It is congenital, therefore, and inherent to the integral protoplasm of the individual or species endowed with it. There is no evidence of its having been acquired through any of the channels that apply to the acquisition of immunity. Its transmission, like other physiological peculiarities, is probably as much under the paternal as the maternal influence, and is lasting; whereas, the transmission of acquired immunity is a

function only of the mother, and so far as we know, is of but temporary duration.

There can be no doubt that the constant exposure of a race of individuals to a disease is ultimately accompanied by a diminution of susceptibility of many of the individuals to this disease, but we have no evidence that this condition of increased resistance persists, and we cannot regard such tissue resistance as a genuine natural immunity.

To admit that the condition of natural immunity, in the sense in which the term is here used, represents, after all, the inheritance of an induced peculiarity, is to admit in general the possibility of the hereditary transmission of acquired traits, "an assumption that has often been made, but never yet proved."*

Natural immunity must as yet be considered as a vital property, inherent to the idioplasm, the intimate nature and workings of which cannot be explained. It distingushes the individual endowed with it only by its protective influences during exposure to particular forms of disease. It is not explainable through any demonstrable excess of protective characteristics of the body-fluids or tissues, contrary to what may usually be done in the case of artificially immunified animals, for, as stated above, the fluids of the body of the naturally immune animal may be neither more nor less germicidal or antitoxic than are similar fluids from animals that are naturally susceptible.

Manifestly the prevention and treatment of disease along the lines suggested by the investigations cited in this paper in many respects closely simulate some of the methods of Nature. It is from this standpoint that we believe the further elaboration and wider application of the principles involved in the processes of preventive inoculation, and serum therapeutics are destined to be of inestimable service in the advancement of the medicine of the future.

Already as a result of these labors, animals have been rendered more or less insusceptible to a number of different infections and intoxications, for instance, to chicken cholera, anthrax, erysipelas, symptomatic anthrax, malignant edema, hog cholera, typhoid fever, hemorrhagic septicemia, vibrionic septicemia, Asiatic cholera, diphtheria, tetanus, pneumococcus infection, pyocyanus infection,

* *Weismann*—Essays on Heredity and Kindred Biological Problems ; Essay on Retrogressive Development in Nature, page 14, Vol. II. Edited by Poulton and Shipley Oxford, Clarendon Press. 1892.

proteus infection, infection or intoxication by bacillus coli communis, and infections by pyogenic cocci.

Not only has the possibility of conferring immunity to these infections been demonstrated, but in the case of certain of them the serum of the blood of the immunified animals has been found to possess properties that can be utilised in the treatment of these infections or intoxications after they are already in progress in other animals. Thus, for example, the treatment of diphtheria by the antitoxin method comes under this head. In the case of erysipelas, the experiments of Marmorek[16] and others indicate similar possibilities. Marmorek found in the blood of rabbits immunified against infection by the streptococcus of erysipelas, a substance that he states possesses curative powers over the disease when it is already in progress in nonimmunified animals. Pfeiffer and Kolle[17] have detected in the blood of animals rendered tolerant to the typhoid toxin a substance that is germicidal to the typhoid baccillus, and Beumer and Peiper[18] find a nongermicidal, but rather an antitoxic substance in the blood of animals artificially immunified to the typhoid poison. Beumer and Peiper state that this serum possesses not only immunising powers, but that the poisonous effects of the typhoid toxins can be neutralised by the subsequent injection of the antitoxic serum. They believe, therefore, that the serum possesses curative virtues. Yersin, Borel and Calmette[19], in their studies upon bubonic plague, obtained from the blood of animals rendered immune to this infection an actively antitoxic serum that they hope to ultimately utilise in the treatment of the disease. The studies on vaccinia lead to the belief that there exists in the blood of the vaccinated animal a substance possessing certain antagonistic relations to the active principle of vaccine lymph[20], whatever that may be. In this case, as with scarlatina, both experiments and results are unsatisfactory, because of the important unknown factors that come into play. From recent investigations it seems probable that the treatment of tetanus by means of antitoxic serum, as is shown to be possible in animals, will, before a very great while, be successfully extended to the disease in men. The treatment of Asiatic cholera by the antitoxin method is apparently destined to be an outcome of the very near future, and finally, the experiments bearing upon the treatment of tuberculosis by means of antitoxic substances is predicted by Behring to be soon successfully demonstrated. Behring and Knorr already claim to have detected in the blood of animals rendered

tolerant to the poisonous influences of tuberculine, (the toxin produced by the bacillus tuberculosis,) a body, antituberculin, that possesses the property of robbing tuberculin of its poisonous peculiarities.[21]

When we contemplate this array of practical results and bear in mind that they are the outgrowth of experiments made with a definite purpose, each step of which was directed toward a particular object, and that through these experiments susceptible animals have been, and may at will be, rendered more or less immune to a large number of diseases of bacterial origin, there is justification for the statement "that the problems relating to immunity and infection have been, in part at least, removed from the realm of pure hypothesis and placed in a position favorable to exact experimental solution."[22]

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LABORATORY EXPERIENCE IN THE BACTERIOLOGY OF DIPHTHERIA.[1]

By WILLIAM G. BISSELL, M. D.,
Bacteriologist, Department of Health, Buffalo, N. Y.

A CONSIDERABLE amount of bacteriological work relating to cultural examinations for the diagnosis of diphtheria was carried on in the laboratory of the Department of Health in this city prior to January, 1895, but it was not until about that time that such work was begun in a regular and systematic manner.

The importance of such examinations has been thoroughly demonstrated by the uniform result of experiments carried on throughout the United States, England, Germany and France, and the time has arrived when the exact value of such examinations can be clearly and definitely stated.

The scope of the work carried on in the Bacteriological Bureau of the Department of Health in this city is familiar to most of the members of this section of the academy, and I will not impose upon your time by going into detail as to the system used, but will confine myself particularly to the points pertaining to the bacteriology of diphtheria, as experienced in making over 1,500 cultural examinations.

The object sought in routine municipal bacteriological examination for the diagnosis of diphtheria, is to promote general sanitation and thereby lessen the death rate. The individual points tending toward this ultimate result are as follows:

1. The confirming of clinical diagnoses and the determining of doubtful cases.

2. The differentiating between the cases of true diphtheria and those caused by cocci, so that persons affected by the latter complaints may not be unnecessarily exposed to diphtheria, as in the case of being sent to a hospital ward, or undergo the inconvenience of being isolated and their dwellings placarded, in case of their remaining at home.

3. To determine the presence or the absence of the specific bacillus in the secretion from the parts previously affected in convalescent cases, the object being to lessen the spread of the disease by not letting such persons at large until the infectious element has disappeared.

My paper this evening will present briefly an account of the

1. Read before the Pathological Section of the Buffalo Academy of Medicine, December 17, 1895; appending circular recently published by the Health Department.

work performed in this city by the Department of Health by summarising such facts as would seem likely to be of interest and of value pertaining to the bacteriology of diphtheria.

It might be well to first explain in a general way the various methods by which routine bacteriological examination is carried on.

There are principally three:

1. By using a culture set, composed of a sterilised swab and the Loeffler blood serum media, the culture being made at the bedside of the patient by the attending physician or those in charge.

2. By supplying the practitioner with a sterilised swab made of lamb's wool. The exudate being collected on the swab and such swab, encased in a sterilised glass tube, sent directly to the laboratory. The bacteriologist makes an examination of the exudate direct before making a cultural inoculation and subsequently examining the cultural growth.

3. By using a platinum wire attached to a glass rod, commonly called an oese, the physician or attendant obtaining the infected material from the throat by the use of the oese instead of the swab, the inoculation being made at the bedside of the patient as in the first-named method.

The objections to the method of using the oese and the one of sending the exudate on the swab directly to the laboratory are apparent.

By an inexperienced person the use of the oese is a difficult and painstaking procedure, and cultural inoculations made in this manner by the ordinary practitioner are very apt to be inferior and more uncertain as to obtaining a good inoculation than those made by the use of the swab.

As to the method of sending the swab containing the exudate direct to the laboratory, it would be impossible in this way to carry on routine municipal examination as it is conducted in the city of Buffalo. The swab must be delivered direct to the laboratory in order that it may not become dried, and this is ofttimes inconvenient or impossible for physicians to do.

The point has been raised as to whether it is possible by microscopical examination of a smear of the exudate to make a reliable and positive diagnosis as to the existence of diphtheritic infection. Such examination would oftentimes be of the greatest value to the physician by the immediate determination of a suspicious case, but the procedure is so uncertain as to reliable results that I do not favor this method for routine work.

Oftentimes only a few organisms are present in the exudate at the time of its collection and it is an easy matter for an experienced observer not to detect their presence. So, considering the inconvenience of being obliged to send the swab directly to the laboratory, and the unreliability as to the result of the examination and the universally good results obtained by the use of the swab cultural inoculation, I am led to believe that the original method, as suggested by Dr. Biggs, of New York, is the most satisfactory in that it is most convenient and much more reliable.

Experience has demonstrated in the laboratory work in this city that persons who have once had experience in making cultural inoculations, and who follow carefully the points laid down in the directions for making such inoculations, invariably get satisfactory inoculations.

Out of 1,535 cultural inoculations made by the physicians in this city since the inauguration of municipal bacteriological examination, but eighty-three were found to be imperfect, and in about one-third of this number the swab had been thrust into the media, showing that the physician had not carefully read the directions, as such portion is noticeably printed in italics.

Occasionally a culture will be so highly contaminated with various bacterial growths that it is impossible to recognise the Klebs-Loeffler bacillus, when such organism is present in small numbers.

The smallest amount of certain germicidal fluids, especially the solutions of the bichloride of mercury, in the throat of a patient at the time of the collection of the exudate will frequently prevent growth on the culture media, and it is important to bear in mind this condition when obtaining material for cultural inoculation.

As to the best media to use in routine diphtheritic examination, I think it is the universal opinion of workers in this line that the Loeffler blood-serum, prepared by the quick method, answers every purpose. Much has been said relating to the value of the bouillonised hydrocele fluid as an isolating media in such examinations. It was claimed that the Klebs-Loeffler bacillus is of more rapid growth than the commoner cocci usually found in the throat of diphtheritic patients, and that such organism, when present in but small numbers in the exudate, will predominate over the other organisms on cultural examinations. I do not think this to be a fact, for carefully conducted experiments as to the isolating power

of this media in relation to the Klebs-Loeffler bacillus tend to show that the commoner cocci develop about as rapidly as does the diphtheria organism.

The Klebs-Loeffler bacillus grows rapidly on various media used in bacteriological work, glycerine agar probably being the most suitably adapted next to the blood-serum mixture.

As to the descriptive characteristics of the diphtheria bacillus, I will not report at length, but I wish to emphasise the fact of the great liability to variations in its form and size. This tendency to change is sure to puzzle the inexperienced observer, though when understood becomes in itself microscopically diagnostic. The organism as found in the exudate ofttimes presents the appearance of a diplobacillus, which stains more or less uniformly, usually showing some polar darkening. In other and much rarer cases it resembles the organism as grown on blood-serum. The cause of this variation may possibly be found in the condition as to the reaction or composition of the mucous membrane or secretion in the throats of different patients. This idea seems very plausible, for under artificial cultivation the character of the media greatly influences the appearance of the bacillus; but the variations shown in the bacilli of cultures cannot be entirely accounted for by the character of the media, or by the temperature at which it was grown, or the staining manipulation, for the cultures of different exudates grown together under precisely similar conditions and stained in like manner often give different results. In some the bacilli may be uniform in size, shape, arrangement and staining, while others will exhibit wide differences in all these respects. The most typical form of the diphtheria bacillus is usually the one grown on blood-serum media, presenting extremely long, narrow rods with wide interruptions usually stained heavily at the ends and of irregular length.

I have noticed that in media containing much water of condensation the staining peculiarities are usually not as well marked, the most typical form of this bacillus being usually found in growths on media that is a week or so old and slightly dried. The best temperature for the rapid development of the Klebs-Loeffler bacillus seems to be that of the body or about 36½ centigrade, and it is usually necessary for cultures to remain from ten to sixteen hours at this temperature to obtain complete development.

The result obtained from the examination of 1,535 cultures shows that in Buffalo the greater majority of the cases of diph-

theria yield cultures of the large size bacillus, which is usually characteristic in shape and manner of staining. It was at one time thought that the length of the organism had to do with its virulence, but experiments tend to show that this has little practical bearing. Out of the 1,535 cultures examined, 412 revealed the presence of the Klebs-Loeffler bacillus, 1,040 did not reveal the presence of the Klebs-Loeffler bacillus, and, as I have previously stated, 83 inoculations would not permit of examination.

Of the 1,040 cultures which did not reveal the Klebs-Loeffler bacillus, the organisms found, named in order of the frequency of their occurrence, are as follows :

No. 1.—Staphylococci, the most numerous being the aureus.

No. 2.—Cocci without any definite arrangement.

No. 3.—Streptococci.

No. 4.—Bacilli other than the Klebs-Loeffler (see note No. 2), and deserving of special mention ; a very large strepto-bacillus is of frequent occurrence.

No. 5.—The thrush fungus.

No. 6.—Diplococci.

The micrococci tetragenus has presented itself in several cultures, but such organism is not of frequent occurrence.

It is a noticeable fact that in several cases where the physician had noted on the report blank that a decided membrane was present in various portions of the mouth, that the auideum albicans would be present in the culture in goodly numbers.

Statistics reveal some very interesting facts concerning the influence of age on the occurrence of true diphtheria, as well as to the mortality of the disease. The ages of persons attacked between January 1, 1895, and December 1st, range between three weeks and about sixty years. The number of cases seem to increase with each twelve months of life up to the fifth year, and then gradually diminish. The mortality is highest in the first three years of life and then steadily diminishes until adult life. There have been two deaths this year of persons between the ages of fifty and sixty years in the city of Buffalo.

The ages and mortality in 728 cases are as follows :

Month.	Deaths as to Ages.			Number of cases reported.	Number of cases discovered by bacteriological examination.
	Under 5.	5 to 10.	Over 10.		
January	23	6	3	77	27
February	8	3	4	48	15
March	14	3	—	58	10
April	7	2	1	43	17
May	3	2	1	39	21
June	6	3	1	44	20
July	11	2	—	48	30
August	12	1	2	48	33
September	15	5	—	54	30
October	23	9	1	114	58
November	28	10	1	142	59
	150	46	14	728	329

Total number of deaths—210.

In cases that have died of diphtheria, in which bacteriological examination had been made at the onset of the malady, it may be a matter of interest and value to note that cultural examinations *usually* did not reveal pure cultures of the Klebs-Loeffler bacillus, there being associated with that organism either staphylococci or streptococci. Another point worthy of consideration and certainly of the greatest interest, is that in the majority of instances where the attending physician would report that the case was very mild and hardly in a condition to be called ill, that both the staphylococcus and the streptococcus would be associated with the typical Klebs-Loeffler bacillus. (See note No. 1.)

The point I wish to bring up for consideration is that the greatest mortality in cases of diphtheria appears to be produced by a mixed infection; that is, the specific germ is usually associated with either the streptococcus or the staphylococcus, the former organism being of the greater frequency.

It seems also to be a fact that when both the staphylococcus and the streptococcus are associated in the same culture with the diphtheria bacillus, that the case is a mild one. From this latter point it would certainly appear as if there was a certain antagonism between the combined cocci and the diphtheria bacillus, and this latter point seems worthy of consideration and experiment.

As to the length of time the Klebs-Loeffler bacillus may remain alive in the throat of convalescent patients, experiments in the city's laboratory have demonstrated this time to be from about six days to thirty-nine days in the cases examined. There is no doubt, however, that the organism can remain a much greater length of

time and be capable of producing the disease, and it is of the greatest importance, from the sanitary point of view, that bacteriological examinations should be made to determine the presence or absence of the infectious element before convalescent patients are allowed to go at large.

Many experienced physicians still find difficulty in believing that cases in which the exudate or pseudo-membrane is entirely absent from the pharynx and tonsils are those of true diphtheria, and it is also difficult to impress upon parents that a case is diphtheria and capable of transmitting the infection, although the person infected is hardly in a condition to be called ill.

In conclusion, I may state that absolute reliance can be placed on bacteriological examination, by a competent bacteriologist, of the bacterial growth on the blood-serum media, which has been properly inoculated and kept for about fourteen hours at the body temperature, in cases where there is a visible membrane in the throat, if the culture is made during the period in which this membrane is forming and no antiseptic, especially mercurial solutions, has been recently applied.

In cases where the membrane is confined to the larynx or bronchi, and where, therefore, there is no visible exudate against which the swab can be rubbed, surprisingly accurate results can be obtained from cultural examinations, but in a small proportion of such examinations the diphtheria bacillus may not be found in the first culture, whereas subsequent cultures will reveal them in goodly numbers. It is a fact, therefore, that negative results in laryngeal cases are not absolutely reliable. In nasal diphtheria, cultures made from the throat will frequently not show the bacillus, whereas those made from the exudate obtained from the nose will reveal them in large numbers. In making a diagnosis for diphtheria it is important to know the duration of the disease, because, although the bacillus may not be present in the culture examined, it may have been present in the throat at some former time in the course of the disease. .

It is a rule, however, that the diphtheria bacillus will remain for some time in the throats of patients after the disappearance of all membrane and constitutional symptoms.

From the points previously stated it is necessary to know the location of the membrane, for negative results in laryngeal cases are not absolutely reliable.

There is yet to be a case examined in the department of health

that has been reported as false diphtheria, which has died of the disease.

[NOTE No. 1.—On looking through literature pertaining to the bacteriology of diphtheria, I notice that other observers have noticed this same condition, such observers being both in this country and in Europe.—W. G. B.]

[NOTE No. 2.—During the discussion of this paper one member of the Academy expressed regret at the author not having referred to the "other organism which closely resembles the diphtheria bacillus—namely, the pseudo diphtheria bacillus." The failure to refer to this so-called "pseudo diphtheria bacillus" was intentional, for in the author's judgment positive proof as to the existence of this bacillus is still wanting. It seems most possible and probable that the referred-to organism is none other than the Klebs-Loeffler germ, altered in virulence and in certain other slight characteristics.—W. G. B.]

DEPARTMENT OF HEALTH, BUFFALO, N. Y.

GENERAL RULES FOR THE PREVENTION AND RESTRICTION OF DIPHTHERIA.

Diphtheria, sometimes known as diphtheritic croup; membraneous croup; diphtheritic sore throat and croup, is one of the most dangerous and fatal diseases known to mankind.

It is very contagious, such contagion being transmitted principally in three ways, viz.:

(1). By personal contact with persons, and the attendants of patients, having the disease.

(2). By contact with the discharges (secretion and excretion) from the affected parts of persons having diphtheria.

(3). By articles of clothing, bedding, carpets, dishes, books, etc., which have been in the sick-room and liable to be infected.

The disease can be transmitted by articles of food, such as milk, bread, etc., and persons having diphtheria, or in attendance on such patients, should not be allowed to peddle or distribute such food, as it is a means of spreading the contagion.

The Cause.—The active agent in the production of the disease, is a germ or microbe, called the bacillus of diphtheria, and it is the germ alone that can cause true diphtheria.

The germ first fastens itself in the throat, nose or some other mucous membrane of the body, and as it grows produces a deadly poison which is absorbed by the system.

It is usually necessary to have some lowering in the normal healthy condition of a person, or an abrasion (sore) on some of the mucous membranes, to allow of the invasion (taking) of the disease, and this par-

tially explains the reason why frequently one person will contract the disease, whereas another person equally exposed does not.

Children under the age of fifteen years are most susceptible to diphtheria, but adults are not exempt and they frequently contract the disease with fatal results.

The Disease.—Although diphtheria is a disease which usually makes the patient very sick, yet it does not always do so, and frequently persons having the disease are up and around and hardly in a condition to be called sick. It is these very mild cases that furnish the greatest source of danger as to spreading the contagion.

Such cases are as capable of transmitting the disease to others, providing the germ be present and alive in the throat, as more severe cases, and such person should remain in the house and be isolated until the germ has disappeared.

During the year 1894, 733 cases of diphtheria were reported to the Department of Health, and 186 of that number proved fatal.

One can appreciate, by this number, the mortality of the disease.

How to Prevent the Disease from Spreading.—Every case of diphtheria is dangerous to life. A physician should be called early and his directions carefully followed.

In case of the poor who are unable to pay for medical services, apply immediately to the Poor Department and a City Physician will be sent to attend the person free of charge.

The sign "DIPHTHERIA" placed upon a house is intended for the protection of the public and its warning should be heeded. More than half the cases of this sickness are contracted because of some one's carelessness, and if all persons interested would heed the warnings given them, its spread might be decidedly limited, for the disease is preventable.

Never enter a house having such sign unless absolutely necessary. Avoid coming in contact with the attendants of persons having the disease.

The patient must be kept in a room alone and no one admitted to that room except those in immediate attendance on the patient. It is well to quarantine the nurse with the patient and such nurse should not mingle with other persons of the household. No person, under any circumstances, should occupy the same bed with a diphtheritic patient. Doors communicating with the sick-room should be kept closed, and it is an excellent plan to hang over the door a sheet moistened with a disinfecting solution.

Sufficient ventilation can usually be obtained through an open window. The best place to isolate a diphtheritic patient is in the uppermost portion of the house. The room in which the sick person is confined should be scantily furnished, containing only such articles as are necessary for the well-being of the patient. All

draperies, carpets, rugs, curtains, pictures, etc., should be removed and the bed clothing should be of the oldest, so that after the disappearance of the infection such clothes may be destroyed by fire. All closets and bureaus should be emptied before placing the patient in the room. The soiled clothing from the sick and the attendant should not be included in the family wash, and such clothes should be placed in a germicidal solution immediately after use and before going through the laundry.

Everything that the patient touches or comes in contact with is a source of danger to outsiders, and all secretions and excretions are especially dangerous. The chamber and bed-pan should be kept half full of a germicidal fluid, and all dishes, spitting cups, medicine bottles, etc., should be thoroughly disinfected before leaving the sick-room, and thoroughly washed in boiling water afterwards. Never use the same dishes on the family table that are in use in the sick-room. Children who have passed safely through an attack of diphtheria should be kept out of school until bacteriological examination fails to reveal the presence of the germ in the secretions from the affected parts. Such examination will be made *free of charge* by the Department of Health for the attending physician, who can obtain the material necessary for the examination at any police station. The germ of diphtheria remains in the throats of persons having had the disease for weeks and frequently months after recovery, and such persons are the greatest source of danger of infection to others. For a similar reason, the convalescent or recently recovered child should not be allowed to mingle freely with his playmates for the same period of time after recovery. It is important that during this time attendance at school should also be forbidden to all children who have lived in the same house with the patient. The school-room must be carefully watched, lest it become a place for the transmission and spreading of infectious disease.

The interments of persons who die of diphtheria must be private, and the corpse should not be exposed to view after it has been placed in the coffin ; moreover, it should be placed in the coffin and buried at the earliest possible moment. Every moment that a diphtheria corpse remains unburied is a menace to the lives and health of the survivors. The body should, immediately after death, be wrapped in a cloth saturated with a strong solution of corrosive sublimate and must be buried within twenty-four hours.

No one should ever, under any circumstances, kiss a body dead of diphtheria ; whoever does so is liable to contract the disease in a very severe form.

These precautions will do very much to prevent the spread of the disease among the survivors. It is a matter of record that carelessly conducted funerals have more than once been the starting point of a fatal epidemic of diphtheria among those who have attended such funerals.

DISINFECTION.

This means the destruction of the disease germ, and consequently preventing the spread of the disease. The best way to disinfect articles is to destroy them by fire or submit them to the action of live steam. Those which it is desired to preserve are usually rendered harmless by thoroughly soaking for an hour in either of the following solutions:

1. Corrosive sublimate, one drachm; hydrochloric acid, one ounce; water, one gallon; or

2. Carbolic acid, six ounces; water, one gallon. Label each, "POISON."

A basin of ordinary soap and water and a basin of one of these solutions, half strength, should be constantly near for the nurse to wash her hands in. Any article infected by a patient should be placed in one of these solutions until it can be burned or thoroughly boiled in water.

In fumigating by burning sulphur, (using three pounds of sulphur to a room ten feet square, and increasing the amount according to the size of the room in proportions of three pounds to each additional 1,000 cubic feet of air space), the room should be tightly closed and allowed to remain so for at least twenty-four hours. The amount of sulphur burned is of great importance.

In proceeding to fumigate, the sulphur may be placed on a bed of cold ashes contained in an iron pot or coal scuttle; this is then put in a wash-tub holding an inch or two of water. The sulphur may be ignited with a shovel of glowing coals, or it may be lighted by a match after moistening its surface with alcohol. Take care not to breathe the sulphurous fumes. The sulphur acts more surely as a disinfectant on articles which are moistened with water, but it is then apt to destroy the color. Thoroughly air the room after fumigating with sulphur. The attempt to disinfect the air of a room while occupied by the sick person is absurd and useless, but the room should be kept ventilated by the entrance of air through an open window.

Physicians are Required by Law to immediately give notice of the first case and of every case of a "disease dangerous to the public health," to the Department of Health and the physician in charge of this disease should coöperate for its restriction.

The house should be placarded for protection of the public, and such means of isolation and disinfection as outlined above should be enforced, in order to prevent the spread of disease.

Law Pertaining to the Abatement of Contagious Diseases.—"No person suffering from any of the diseases named in Section 11, and no person in charge of such patient shall attend any public, private or Sunday school, or any public place, or enter any public conveyance. Nor shall any such person expose himself or herself in public streets, or n any manner aid in spreading their malady.

"Nor enter any public conveyance without first notifying owner, driver or person in charge, who shall provide for its disinfection before again permitting its use; but no hack or public conveyance shall permit the entrance of any one suffering from small-pox, typhus fever or any other pestilential diseases."

Law Pertaining to the Reporting of Contagious Diseases.—"It shall be the duty of any physician immediately upon the first visit to report to the Health Department all cases of infectious or contagious diseases.

"Any person acting as nurse or midwife in charge of infectious or contagious disease, in case the services of a physician are dispensed with, shall likewise report.

"Every proprietor or person in charge of a hotel, boarding-house or lodging-house shall report immediately upon the discovery of infectious, pestilentious or contagious diseases, and any person knowing of, or having reason to believe of the existence of a case of infectious or contagious disease not reported or concealed, shall report the same to the Department.

"An officer in charge of any prison, asylum, or public institution of any kind, shall report immediately any cases of infectious or contagious diseases arriving, and each additional case as discovered, and once a week a report of all cases, upon death or recovery, the date and details of the disposition of the case according to the rules of the Health Department."

Law Pertaining to Children Attending School.—"It shall be the duty of the principal to exclude from school all pupils coming from a house where a contagious disease exists, or in which a death had occurred from such cause. Said pupils shall not be readmitted until there has been a compliance with the rules of the Department of Health governing the admission of pupils to schools. When a principal has reason to suspect existence of any contagious disease in a house, he shall immediately suspend pupils living therein, until the case has been investigated and shall report the same to the Department of Health. Contagious diseases shall include diseases of the skin, eye, itch, mumps and whooping cough."

Law Pertaining to Burial of Persons Dying of Contagious Diseases.—"No undertaker shall use any vehicle other than a hearse for conveyance of the body of any person dying from any of the specified infectious or contagious diseases.

"Nor shall the body of a person dying of infectious or contagious diseases be carried into any church, hall or any public place.

"The body of no person dead from infectious or contagious diseases shall be brought into the city without special permit."

"In case of death from any pestilential disease, small-pox, scarlet fever, diphtheria, yellow fever, cholera, typhus, etc., it shall be the duty of the person in charge of such deceased to cause him or her to be

buried within twenty-four (24) hours, and the person in charge of the funeral of persons dying of these diseases must so conduct such funeral as to be absolutely private."

Law as to Placarding of Houses.—"It shall be the duty of the Department of Health to put up and maintain in a conspicuous place in front of any building in which there shall be any person sick or infected with small-pox, varioloid, scarlet fever or diphtheria, a card or sign on which shall be written or printed, in English and German, the words designating the contagious disease with which the sick person is afflicted, and shall keep the same so posted during all the time that any person so infected shall remain in said building.

"And no person shall remove such sign or card placed on said premises, without permission of the Health Commissioner.

"In case of removal of such sign by accident or design, it shall be the duty of the occupant of said building to immediately notify the Department of Health."

ERNEST WENDE, M. D., *Health Commissioner*.

A PSEUDENCEPHALIC MONSTER.

By WILLIAM L. CONKLIN, M. D., Rochester, N. Y.

THE specimen which I present is not of special interest because of its extreme rarity, for it belongs to one of the more common forms of malformations. It is of interest, however, as an illustration of the fact that there is, at times, a striking resemblance between the malformed fetus and some object which the mother and her friends are firmly convinced was the source of all the trouble. This resemblance is often fancied rather than real, but it is, doubtless, largely responsible for the widespread belief among the laity that every deviation from the normal, in any of the varying degrees, from a strawberry on the arm to a double-headed monster, is due to some mental impression received by the mother during pregnancy. This is a less unfortunate error than the older one that these monsters were due to the potent spell of some evil spirit; but it is an error and one, too, which is the source of much needless anxiety and distress to many mothers, not a few of whom are intelligent in regard to other subjects. Evidently it is the duty of the physician to do all in his power to dispel this prevalent error. He must, however, first rid his own mind of any lingering doubt as to the "maternal impression" theory and be able to speak very positively in regard to the subject. There was a time when this theory had its advocates among intelligent physi-

1. Read at the twenty-eighth annual meeting of the Medical Association of Central New York, at Syracuse, October 15, 1895.

cians, and, if I mistake not, there are yet to be found those whose views in regard to the subject are not entirely settled.

The study of embryology has done much to clear up this somewhat obscure subject and has furnished a basis of facts for our present knowledge of teratology. The investigations of Goeffroy,

[Fig. 1.—POSTERIOR.]

CONKLIN—PSEUDENCEPHALIC MONSTER.

Saint-Hilaire and others have proven, beyond doubt, that these malformations are very largely due to arrested or imperfect development of the fetus, or, to quote a sentence from the excellent work of Hirst and Piersol, they are "deviations explicable by the application of the definite laws of development."

In the work just referred to, the following simple classification of human deformities is given :

I. Those produced by variations in growth, either excessive or arrested.

II. Those produced by defective union of component, embryonal parts.

III. Those produced by cleavage (either partial or complete) of the primary embryonal cell masses.

While there are some malformations which are the result of

[FIG. 2.—BROWNE.] [ANTERIOR.]

CONKLIN—PSEUDENCEPHALIC MONSTER.

more than one of these causes, and others which may be due, either wholly or in part, to pathological processes, *e. g.*, inflammatory changes, still the large majority may be placed in one of these classes. "Increased intracranial pressure, resulting in rupture of

the early cerebral vesicle," is mentioned by Hirst and Piersol as a possible cause of anencephalus; but they observe that "the rudimentary condition often observed of the basal portions of the cranium and of the upper cervical vertebra, bears additional testimony to the influence of a condition of primary arrest of development."

The term anencephalic is often used in describing the various forms of malformation resulting from arrested brain development. Saint-Hilaire, however, applies it exclusively to cases in which there is no trace of brain tissue to be found, and uses the term pseudencephalic in describing cases in which the brain is replaced by a mass of connective and membranous tissue, blood-vessels and possibly traces of nerve tissue. The specimen presented belongs to the latter class, as there is such a conglomerate mass of tissue at the base of the skull. The occiput is wanting and the other cranial bones either absent or very imperfectly developed. This faulty development of both brain and skull, together with a similar defect in the cervical vertebræ, accounts for the peculiar physiognomy which has been aptly described by the term "frog-headed."

It is said that malformations of this class may be diagnosticated during pregnancy by the presence of hydramnios and of fetal movements which are unusual in character. In this case both of these conditions were present. The amount of liquor amnii was so large that a literal deluge followed the rupture of the membranes. Labor came on about six weeks before the expected time and was tedious in character. The head presented, but the absence of the occipital bone made an early diagnosis of the presentation decidedly difficult. A day or two after the confinement a sister of the patient, informing me that she had discovered the cause of all the trouble, produced a Palmer Cox brownie, which, it will be seen, has the grotesque features characteristic of that remarkable family. It had been left in the yard by the children and at an early period of her pregnancy the mother had stepped on it, and thinking it was a toad, for which animal she has a special abhorrence, she was much frightened. As the photograph will show, there is a striking resemblance between the brownie and the baby, and it is not strange, in view of the popular belief, that the former was held responsible for the peculiar physiognomy of the latter. These resemblances, whether fancied or real, furnish an argument in favor of the mental impression theory, which, in

the minds of many of the laity, is still unanswerable. Let us hope, however, that the time is not far distant when this popular error shall give place to a better understanding of the subject and when mothers shall no longer be haunted with the fear of "marking the baby."

96 South Avenue.

A CASE OF RHINOSCLEROMA ORIGINATING IN THE UNITED STATES.[1]

By GROVER WILLIAM WENDE, M. D.

Clinical instructor of skin diseases, University of Buffalo, physician for diseases of the skin at the Erie County Hospital.

IN THE year 1870, Hebra and Kaposi, for the first time, conjointly described the exceedingly rare affection of the skin which they designated as rhinoscleroma.

It was characterised by Kaposi as a new growth, closely allied to sarcoma, with its seat about the nose, occurring usually on the septum or upon one or both alæ. There was no pain, nor were there any symptoms of an inflammatory nature present. The initial lesions were nodules embedded in the cutis and in the deeper layers of the mucous membrane. The parts thus involved slowly enlarged, increased in density, and eventually felt like ivory to the touch, extending upward from the lip and downward to the pharynx from the posterior nares. Individually, these manifestations were flat plaques or nodules elevated and circumscribed in appearance. They were at times papular and tubercular. When pressed they were painful. This new growth involved the skin and could only be moved with it. However, there was no attachment to the underlying structure—bone and cartilage remaining free. No hair or glands were discernible in these lesions.

As the disease progressed, the alæ became enlarged, flattened and indurated to such an extent that they could not be pressed together. Apart from the deformity, the pain on pressure, the interference with respiration, and finally the danger of death from suffocation, the general health was unimpaired.

Geographically, I found upon reference that rhinoscleroma was not uniformly distributed: Austria leading with 63 cases, being nearly one-half of all cases recorded; next came South West Russia,

1. Read at the meeting of the Pathological Section of the Buffalo Academy of Medicine, January 21, 1896.

to which are credited 37; then followed Central America, 24; Italy, 7; Burmah, 4; Egypt, 2; Brazil, 3; England, 3; France, 2, and Buenos Ayres, 1.

In this country, according to reports of the American Dermatological Association, only seven cases were placed upon record,

FIG. 1.

and in every instance these were of foreign origin, emanating usually from Austria, where the tumors first appeared.

CASE.—The patient, whom I have the honor to present before this Academy for its consideration, was referred to me, four months ago, by Dr. Roswell Park. He is of American parentage, a resident of Buffalo, the place of his birth, which he never left but on one occasion, and that was on December 18, 1895, when he was presented before

the New York Dermatological Society. He is 11 years of age, and is apparently strong and robust. His family history is exceptionally good, exclusive of the mother who died at the age of 33 during pregnancy. His grandparents were noted for their remarkable longevity, his paternal grandfather having attained the age of 90, and his paternal grandmother having exceeded the age of 101 years; while on the maternal side their respective ages were 80 and 78. The father, a locomotive engineer, is 44 years old and is seemingly a typical specimen of health and strength. He has two brothers, aged respectively 17 and 18, who have always enjoyed the best of health.

It was ascertained upon inquiry that the condition from which the patient was suffering had existed for about a year and a half, though in a less marked degree, and was progressive in its nature. He disclaimed all knowledge of any injury or exposure to irritating influences of any description. His father was the first to observe the change in the normal skin, consisting then of a pink spot slightly raised, below the right nares. There was no pain. At the expiration of three months a perceptible elevation appeared, the beginning of what soon developed into a pronounced ridge.

These manifestations, the spot and the ridge, were joined at their margins near their respective centers. As time went on, the ridge assumed greater proportions and finally extended to the left side of the nose.

My first examination revealed a nodule, irregular in outline, just below the right nares, as seen portrayed in the accompanying illustration, Fig. 1—which was removed sometime in August for a microscopical investigation. Its structure was quite superficial, while the tissue beneath was infiltrated and very hard. Upon the right side of the nose two sharply-defined ridges were seen, each measuring about one and three-fourths inches in length, having between them areas of unaffected skin. The upper one was the least prominent, and was of uneven width.

The left side of the nose showed but one ridge, which had a uniform width of nearly half an inch. These ridges, which were exceedingly pronounced and indurated, united upon the bridge of the nose. The right ala was uniformly thickened, causing a narrowing of the corresponding lumen of the nostril. The left ala, at this time, was not involved; the line of demarcation between these lesions and the healthy skin was abrupt.

In considering the diagnosis we may readily eliminate rhinophyma, tubercular lepra, tubercular lupus, keloid, epithelioma and sarcoma by the process of exclusion. That it is not syphilis has been demonstrated by the fact that a thorough antisyphilitic treatment for one year proved fruitless.

From the disfigurement, its glossy appearance and localisation, its origin from the nasal mucous membrane, later, its encroachment upon the lower part of the nares, its extension backward in the nasal cavity to the posterior nares, its gradual development without disintegration, its peculiar hardness and elasticity, its extension to the upper lip with a sharp border and its regeneration of the excised

FIG. 2.

JANUARY 1, 1896.

WENDE: A CASE OF RHINOSCLEROMA.

portions,—all this has led me to conclude that my patient is afflicted with no other disease than rhinoscleroma. The case is one of unusual interest, not alone for its rarity, but from the fact that it is the first appearance of the affection in an American by birth ever recorded.

The treatment of this disease is most unsatisfactory, as the growth is liable to return almost immediately after the removal.

All that can be accomplished is merely palliative—namely, keeping the air-passages open as far as practicable by dilatation through the introduction of catgut drainage-tubes or compressed sponges.

To establish a cure, cauterisation with the galvano-cautery, caustic potash, pyrogallic acid, or the total extirpation with subsequent plastic operation, have been recommended on the same principles and with the same determination. Secretan advised the extirpation of the nodules and the dilatation of cicatricial bands by means of intubation with Schrötters' sound. This course, he says, was followed by decided improvement, the patient being afterward enabled to return to work. However, the plaques reappeared within one year, but the tissue, relaxed by dilatation, remained distended.

In 1894, Pawlowsky, of Kiew, treated two cases hypodermically with rhinosclerin, an extract prepared from a pure culture of the bacillus of the disease. He observed that the formation of cultures was materially modified by the addition of the extract to the culture medium. He further demonstrated that an injection of the glycerin extract of the bacillus into a patient 18 years old induced fever, swelling, and redness of the nose. One month later, after fifteen injections, the process became so subdued that the plaques, which were so prominent in their induration, softened, and on examination showed symptoms of a condition which was of an inflammatory nature. After the expiration of one year's treatment, its intensity was arrested and all progress ceased. Thus Pawlowsky ventures to hope that he has discovered a remedy of diagnostic and therapeutic value in the treatment of rhinoscleroma by injecting rhinosclerin.

Stuknovenkoff, of the same city, puts his faith on the subcutaneous medication with arsenic, which was employed by him in a patient aged 21 years, who had suffered from this malady for three years. For the first four days a mixture of Fowler's solution 1-1000 was used, and gradually increased until 12 per cent. solution was invariably injected. These subcutaneous injections were continued for fifteen months, their number amounting to 200 in all. There was at once an apparent alleviation of symptoms and a disappearance of the new growth. Six months subsequent to the last injection the patient gave no evidence of relapse; improvement seemed permanent and his general health good.

Encouraged by the result obtained by Stuknovenkoff, I decided it no longer desirable to consider the treatment of rhinoscleroma

as essentially palliative; therefore I have now begun injecting a solution of arsenic into the plaques of the disease of my patient. I shall reserve judgment for a while as to its probable result. At the same time it is fair to say that I am not altogether hopeful as to its real and permanent value.

An account of the examination of the excised tissues by Dr. Herbert Williams will appear later in the JOURNAL.

471 DELAWARE AVENUE.

PRESIDENT'S ANNUAL ADDRESS.[1]

TREATMENT OF DIPHTHERIA.

By FREDERIC W. BARTLETT, M. D., Buffalo, N. Y.

UNDER the shadow of a great physical affliction I am compelled to forego what would have been to me one of the most pleasant acts of my life, the delivery of the annual presidential address, and to avail myself of the kind offer of the secretary to read this paper,—one of the many evidences of his good-will during our official connection.

Forty years ago I took up my residence in Buffalo, and within that period almost all of the great evolutions of our art have occurred; not only with ourselves as a profession, but in all that exalts and embellishes civilised life, the most wonderful progress has been made.

Leaving to various societies the task which remained to them, and referring scarcely at all to the more popular phrase, "familiar to our ears as household words," my thoughts turn to the results of special scientific investigation and experiments dealing with the very origin and methods of life hidden through all the ages, to the days succeeding Jenner, whose almost accidental observation not only relieved the world of the continual ravages of an awful pestilence, but ultimately introduced through the scientific studies and experiments of Pasteur and other notable coadjutors and successors, after years of comparative slumber, hypodermic antitoxins, whose value and importance are now beginning to be made known.

In this paper I report only a few cases of diphtheria. Twenty-seven years ago I was called to see a child sick with diphtheria, on Elk street, another child then lying dead in the house from the same malady. The disease had invaded the larynx. Across the street

1. Read at the annual meeting of the Medical Society of the County of Erie, January 14, 1896.

was a tin shop, where I had a small tin tube made, ten inches in length, one-quarter inch in diameter, with a slight curve at one end. With this I introduced into the fauces finely powdered table salt, a small quantity, equivalent to an ordinary hypodermic tablet, at the same time raising a small blister over the nuchæ, about the size of half a dollar. This was dressed every three or four hours with lard, to which a few grains of fine salt had been added. By this application a free discharge was created, the laryngitis was relieved and the patient made a good recovery.

I subsequently reported this case, with nine others, to the Buffalo Medical and Surgical Association,—eight being cures, two deaths from relapses, respectively, at the end of one and two weeks. Since that date I have reported modifications of the throat application. Later I used powdered quinine, tannin and sulphur, and later still I used a powder of which I give the formula:

Quinine	gr. xx.
Menthol	" x.
Thymol	" x.
Pulv. sulphur	" xx.
Pulv. marsh-mallow or starch	ʒ ii.

This powder, when used, should be rubbed up each time, as it granulates coarsely, the menthol and thymol being apt to make it sticky.

I question whether caustics, either in solution or solids, are of any real use as an application in diphtheria. What we want is a soluble germicide applied in powder or spray form.

Within the past year I have treated six cases with the application given above, with prompt success, so prompt indeed that the variety of the disease might be doubted had it not been confirmed by the bacteriologist of the health department. The effect of the application was uniform in every case. These applications were made every fourth hour. After the first one, there is generally an arrest of the spread of the exudate, while the third or fourth rolls up in appearance like light wool and is expelled, leaving only the clean ulcer or ulcers to be treated with the general application somewhat longer.

The *modus operandi* is as follows: take a leaf from a letter pad of good paper, a glazed surface being preferred, and use an ordinary wooden pencil, first removing the rubber to give it uniformity. Use the pencil to shape a tube from the paper; use the entire sheet if it is not very large, have an assistant wind thread around each end and also in the center, to prevent unrolling, then

blow the pencil out or push it out with some smaller rod; use of the powder deposited in the hollow of the left hand almost as much as would make a hypodermic tablet or small pea; gather this into the end of the tube. An attendant securely holding the child, with a teaspoon or dessertspoon depress the tongue, then blow vigorously the powder into the fauces. Repeat every third or fourth hour, carefully using the end of the tube marked for the operator. If there are other children in the family, prepare separate tubes for each. Use in the same way on the preventive theory.

The preventive theory is this: diphtheria makes its incursion on a limited area, including one or both tonsils and the posterior fauces. This may indicate a simple impinging upon the surface in the act of inspiration, or something more—a *natural selection* for nutrition and reproduction. The powder used is purely empirical, but it is intended to illustrate experimentally the possibility of clothing the mucous surface with a germicide adhesive application inimical to *natural selection*. Assuming by repeated tests that the caustic germicides are too destructive in their local effects and too brief in the time allotted for a safe application to accomplish the death of the bacillus, we may endeavor by the continuous effect of application inhibitory to the reception, propagation, locomotion and transmission to form colonies or toxides in the circulation, we diminish the invading host and lessen the task suddenly imposed on the ordinary antitoxin provided by nature. The most important action of the artificial antitoxin introduced hypodermically changes wholly the prognosis; the mucous membrane of the tonsils and fauces is no longer a field for the reception or propagation of the receptive germ, and since the area thus defined is the only one that has a natural selection by the bacillus, and all observations note this, it follows that promptness must soon very largely reduce the ravages of diphtheria. You will note the importance I attach to the changes in the propagation area, also the artificial antitoxin in the circulation. It is from this theory, the increased circulation in the skin, that I based my treatment of scarlet fever; the dry mustard frictions increased activity of the circulation and the subsequent bichlorate bath returns the blood, minus a large proportion of its toxin, to pass through the capillaries and glands, inhibiting the activity of the disease.

In closing this paper, I thank the society, in retiring from office, for having conferred upon me the highest honor it is in its power to bestow.

Progress in Medical Science.

OPHTHALMOLOGY.

CONDUCTED BY ALVIN A. HUBBELL, M. D., Buffalo, N. Y.
Professor of ophthalmology and otology in the Medical Department of Niagara University.

FORMALIN AS A PRESERVING AND HARDENING AGENT FOR EYE SPECIMENS.

DR. WILLIAM H. WILDER, of Chicago, (*Ophthalmic Record*, October, 1895,) writes that there are many disadvantages accompanying the use of Müller's fluid and alcohol for hardening eye specimens. The former so discolors the tissues that beautiful microscopic preparations are difficult to obtain; while the latter, unless cautiously used, causes much shrinking and distortion of the specimens.

These objections, he holds, may be overcome by the use of formalin, a 40 per cent. aqueous solution of formaldehyde. This may be diluted with water to any desired strength. The author has found a 5 per cent. to be the most useful.

Immediately after enucleation the blood is washed from the eyeball and it is dropped into a bottle containing several ounces of a 5 per cent. solution. In a few days it will be hard enough to bisect, which can be done with a razor, without first freezing, provided the contents of the globe are solid; if, however, the vitreus, either normal or fluid, be present, it is best to freeze the eyeball before cutting, as the formalin does not harden the vitreus sufficiently.

The half to be preserved is then treated according to the method of Priestly Smith, by placing it for twenty-four hours in a 33⅓ per cent. and then a 50 per cent. solution of glycerine and water.

After this it is mounted in a glass cup in glycerine jelly.

WHICH CANALICULUS TO SLIT IN PROBING THE NASAL DUCT.

MR. J. B. STORY, (Dublin,) writing on probing the nasal duct, in the *Ophthalmic Review*, June, 1895, says: "The obstruction to be overcome is situated in the nasal duct, and in order to pass the large-sized probes, which are now and have been for many years so extensively employed in this country and in America, it is necessary to divide one of the canaliculi. It might seem a matter of no importance whether the upper or the lower canaliculus is selected

to suffer the necessary mutilation, but the choice is not a matter of indifference; the results are far better and more easily attained by selecting the upper instead of the lower. . . . . My own practice in this matter dates from many years back, and was adopted in consequence of my observing many patients who had been treated by division of the lower canaliculi, whose nasal ducts were perfectly patent, but who, nevertheless, still suffered from constant epiphora, and whose watery eyes were observable to the most casual observer. Since I have divided the upper canaliculus, I may have failed in some cases to obtain a permanent patency of the nasal duct, but I have never failed to relieve the epiphora in the cases in which I succeeded in curing the stricture of the duct."

ASTIGMIA VERSUS ASTIGMATISM.

GEORGES MARTIN, (*Annales d'Oculistique*, March, 1895,) in a brief note proposes to substitute the word astigmia for astigmatism, as being, first, shorter and therefore more convenient, and secondly—a more important reason—etymologically correct. From the point of view of accurate derivation there is, we believe, no doubt that he has reason on his side.

THE RADICAL OPERATIVE TREATMENT OF TRICHIASIS.

Mr. KENNETH SCOTT, of Cairo, (*The Ophthalmic Review*, September, 1895,) describes a method of operation which he now employs and has termed, for the want of a better word to express its nature, "tarsal reposition." Having performed it on a large number of cases with almost invariable success, he now feels justified in making the matter generally known.

The instruments requisite for operation are the following: (1) A scalpel, or a Beer's cataract knife, with a well-rounded off and sharp-cutting point. (2) An ordinary entropian spatula, which is more convenient to use if a narrow square metal ridge is added across the back, enabling the operator to hold it in position, when necessary, with the fifth finger of the left hand. (3) A pair of strong double-bladed fixation forceps, closed by a sliding catch. (4) Needle-holding forceps, two small double-eyed curved needles for wire, and very fine silver wire, thoroughly softened before use by being passed through the flame of a spirit lamp.

The operation may be described as follows: the eyebrow and both surfaces of the eyelids having been thoroughly cleansed, the

spatula is passed into the conjunctival fornix, under the upper eyelid, which is then everted; an incision is made on this conjunctival surface of eyelid, parallel to, and at a distance of about 2 m.m. from the margin; it must divide the tarsus completely in its whole thickness, and from end to end. Any bleeding which occurs is easily arrested by pressure. The eyelid is replaced in position, and its divided margin grasped between the blades of the forceps; the catch is closed, and the handle of the forceps then carried upward, so as to rest against the eyebrow, and thus forcibly evert the separated portion of the tarsus which carries the eyelashes. One needle armed with silver wire, about 18 inches (45 c. m.) long, is sufficient for each eyelid; it is passed vertically downward, through the skin-surface of the center of the lid into the substance of the upper portion of tarsus and emerging in the middle of its divided edge, then enters the original anterior surface of the lower separated and everted portion of tarsus, to be finally brought out on the free margin of the eyelid, midway between the eyelashes and conjunctival edge. Two other sutures are similarly introduced, one toward each end of the eyelid. The opposing ends of these three sutures, which should be left long, are now separately twisted together, not so tightly as to cause constriction, but just firmly enough to retain the eyelid margin in its everted position. The forceps are removed. The remaining part of the suture is now passed along in the tissue of the eyebrow, from one extremity to the center, at which points the corresponding twisted strands of wire are attached to it; the needle is re-introduced at the center of the eyebrow, close to its point of emergence, and is brought out at the opposite end, where the third remaining twisted suture is secured to it. When the lower eyelid is the site of operation, the tissue of the cheek is used as a fixation point, instead of the eyebrow.

The operation occupies only about three and one-half to four minutes. Usually a requisite amount of anesthesia can be produced by the simple injection of cocaine in the eye, as the operation is such a rapid one. Subcutaneous injections of cocaine in these cases has hitherto been found unsatisfactory. To several patients who were very nervous, and sometimes also to women, either nitrous-oxide gas or chloroform has had to be administered, but, as a rule, the patients have borne the operation very well.

No dressing other than a dusting of dermatol, etc., in powder, need be employed; the parts should be kept absolutely clean, and

the stitches removed on the fifth to seventh day. This is best done by first dividing the three twisted strands, then the eyebrow sutures on each side of and close to the central knot should be divided and the two halves from either end withdrawn; then each loop embracing the lid margin is cut, and the wire being soft, is easily withdrawn by simple traction.

After the lapse of four to ten days from the removal of the stitches, it is most difficult to realise, except on very close examination, that the eyelid has ever been interfered with.

GENITO-URINARY AND SYPHILITIC DISEASES.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

CYSTITIS IN CHILDREN.

ESCHERICH (*Jahrbuch Kinderheit Kunde*, 1895, *Archives of Pediatrics*, January, 1896,) reports ten cases of cystitis in girls under ten years of age. The symptoms were present from five to eight days before treatment was commenced and consisted of desire to urinate, slight burning upon passing urine and of pain in the region of the bladder. The urine was scanty, and upon standing deposited a copious sediment.

The microscope showed this to contain pus cells, bladder and kidney epithelium. Cultures made from the fresh urine showed unmistakably the presence of bacterium coli. In these cases urethral blennorrhea preceded the cystitis.

CRYPTOGENIC CYSTITIS AND PYELITIS.

POSEN (*Journal of the American Medical Association, August 3, 1895,*) states that cystitis often occurs in patients who have never been catheterised and pyelitis without being preceded by cystitis. Such cases indicate that pus-producers have immigrated from the circulation. Pyelitis frequently appears after abscesses and furunculoses. The healthy body continually harbors immense numbers of pus-producers, which relatively slight causes can send into the blood and kidneys.

Intestinal bacteria, prominent among them the bacterium coli, are innocuous parasites so long as they inhabit their normal domiciles; but as soon as they migrate into other tissues they act as most energetic pus-producers. Experiments show that from eighteen to twenty-four hours after tying the rectum the entire body is inundated with the bacterium coli.

The bacillus prodigiosis was injected into the rectum of animals and the gut was then ligated; after the lapse of the same time, this organism was found in all of the organs of the body and especially in kidneys and urine. Coloring matter in solution injected into the rectum under similar circumstances was found in the kidneys and urine within from twelve to fifteen minutes.

THE IMPORT OF CASTS IN THE URINE.

BREWER (*Canadian Practitioner*, October, 1895,) says a person continuously or periodically passing urine containing casts, with or without albumin, is not in good health. His kidneys are vulnerable and he is prone to contract other diseases. The initiative process may not be an actual state of inflammation and there may not be recognised signs of kidney disease and yet the subjective symptoms may be very pronounced, unaccountable to the attending physician because sufficient attention is not attached to the presence of casts.

In some cases albumin is intermitting in its presence and appears only when a severe nerve storm rages. Both casts and albumin may be intermitting and there be present a dormant pathological condition, which may at any time be aggravated into activity. There are several reasons why the search for casts may be negative:

1. Microscopical incapacity.
2. Casts may be absent owing to latency of the kidney disturbance.
3. Insufficient instrumental equipment. The centrifuge should always be used.
4. The examiner may not attach sufficient importance to the presence of casts if albumin be not found.

Brewer alleges that casts found in the urine of athletes after great muscular exertion indicate damaged men. The symptoms produced by vulnerable kidneys are the various neuroses, particularly neurasthenia, gastro-intestinal and respiratory manifestations, migraine and other forms of headache.

URINARY EXAMINATIONS.

LICHTY (*Medical News*, November 9, 1895,) says: 1. A continued low specific gravity must be looked upon with grave suspicion, until it can be proved beyond doubt that the kidneys are normal.

2. In nephritis, especially of the chronic interstitial type, it may happen that at times during the greater part of the disease the urine may contain no albumin that can be detected.

3. Casts may be present in the urine when it is impossible to detect any albumin by the usual tests.

4. Casts are very easily destroyed in the urine by bacteria during the process of fermentation and unless the examination is made within an hour or two after the urine is passed, the failure to find casts does not prove the nonexistence of nephritis. The urine should be more frequently examined, especially after sickness.

CALCULUS IN THE KIDNEY.

BARTHOLOW says that borotartrate of potassium is the first remedy for calculus in the pelvis of the kidney. A weak solution must be used for a long time, a strong solution being detrimental. The calculus of the kidney is formed from uric acid and the neutral phosphatic alkaline salts are the best solvents of uric acid; therefore, to promote its elimination they would appear to be the best remedies to administer. The fruit acids are very useful, therefore abundance of fresh fruit would also be indicated for the relief and prevention of nephritic calculi.

A TEST FOR PUS IN THE URINE.

DROP a few minims of tincture guaiac into a test-tube partially filled with urine, heat it to about 100° F. and if it turns pale blue, pus is present in the urine. This is a convenient test, but not reliable, as the reaction sometimes fails to materialise, although pus is found by the microscope.

A NEW CURE FOR SENILE HYPERTROPHIC PROSTATE.

DR. A. CULLY writes to the *New York Medical Record* that injecting cocaine twice a week for two months directly into the testicles, will cause the prostate to shrink and that this procedure is fully as effective as castration.

ABORTIVE TREATMENT OF GONORRHEA.

DIDAY says: If the secretion is slight in quantity, slightly colored and more mucoid than purulent, if the lips of the meatus are not swollen and but slightly tinted with an erythematous redness, it is not too late to apply abortive treatment.

A PRESCRIPTION FOR GONORRHEA.

J. WILLIAM WHITE gives the following prescription for injection in the second stage of gonorrhea:

℞ Mercuric chloride ..... ¼ gr.
Carbolic acid ..... 1½ drs.
Zinc sulpho-carbolate ..... 24 grs.
Boroglycerin (50 per cent. solution) 2ʒ
Rose water sufficient to make 8ʒ

A SOLUTION FOR FEHLING'S TEST.

DISSOLVE 8.7916 grams of electrically deposited copper in 93 grams of concentrated sulphuric acid, diluted with an equal volume of water, and then add sufficient concentrated water of ammonia to bring to the measure of 1,000 c.c.; of this solution, 10 c.c. represent 0.05 grain of glucose.

NEPHRITIS VIEWED FROM THE STANDPOINT OF INDIVIDUAL CELL LIFE.

MEMINGER and EVANS (*Medical News*, 1895, lxvii., p. 480,) say that physicians treating symptomatology and overlooking primarily diseased organs, fail to relieve their patients; that is, they do not take into consideration the disturbance of the ultimate cell structure of which the organs are composed.

The cell itself is an organ and its function is as well defined as that of the major organs, which are but aggregation of cells. The cell performs its functions under normal conditions, unless perverted by irritation. Health depends upon normal cell action. Nephrites are generally considered diseases of the kidneys, followed by various constitutional changes.

Is nephritis or albuminuria primarily a disease of the kidneys? Primarily, nephritis is acute or chronic irritation of the cell organs of the whole body, causing cell vomiting or the elimination of cell food, that is, albumin. Disease is irritation. Irritate any of the organs of the body and there arises peculiar manifestations. If this is true of large organs, is it not true of individual cells? Irritants are brought in contact with cells causing perversion of function, inability to utilise nutritive material and it is thrown off or vomited. The stomach rejects crude food, the cells reject peptonoids and albuminoids. Numerous diseases and various drugs cause specific irritation of the cell organs of the entire body.

The tendency of acute inflammation is to chronicity, and treatment should be directed to the affected part. The individual-cell organs will as surely become chronically inflamed as the major organs. Acute gastritis causes acute vomiting; acute cell-irritation causes acute cell-vomiting or acute albuminuria. From this standpoint albuminuria is a direct symptom of either acute or chronic general cell-irritation; the hypersensitive cells throw off their food material, albuminuria and kidney changes are secondary thereto. Now, assimilated food material and all systemic waste material must be eliminated and the kidneys are the principal source for sifting these products from the blood, and if overworked they suffer.

Treatment should be directed to remove the cause and soothe the general cell-irritation, promote hygienic conditions, mental and physical rest, together with proper diet. Milk is nonirritating, therefore the best food. Rare meats without condiments, except salt, and all the cereals and white potatoes may be allowed. Nitrogenous foods may be allowed if the albuminoids are assimilated. Opium in small doses allays irritation and may be given for a long time. Codliver oil improves the nervous system, increases urine and perspiration, improves the appetite and nutrition, increases the number of the red blood-cells and healthy cell formation and has a general alterative effect.

OBSTETRICS, GYNECOLOGY AND PELVIC SURGERY.

CONDUCTED BY WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.,
Examiner in obstetrics, New York State Medical Examining and Licensing Board.

ECTOPIC GESTATION OCCURRING TWICE IN SAME PATIENT; TWO OPERATIONS; RECOVERY.

Ross, J. F. W., of Toronto, (*Am. Jour. Obstetrics*, February, 1896,) reports a case of his own as follows:

Mrs. H., aged 24 years; no children, though had miscarried. March 20, 1891, became "unwell" and so continued for seven weeks; then flowing ceased, but commenced again June 9th, when she was seized with pains similar to labor; no other symptoms of pregnancy. June 30th, she walked to the hospital. Two days later she entered for operation. Abdomen was filled with liquid blood, grumous in appearance, and though she had been walking around the day before operation, yet, in the opinion of the operator, the blood had been in the abdomen several days. She made an excellent recovery.

October 10, 1895, Dr. Ross was summoned by Dr. Noble to see same patient described above. He saw her within twenty minutes; found her collapsed, pale, with all appearance of internal hemorrhage. Patient had gone two weeks over her period. Under anesthesia Ross felt blood clots in Douglas's pouch break down under the examining finger. A small mass was felt to the left of the uterus. She was removed to the hospital and within an hour after first seeing her Ross operated. Blood gushed out on section; abdomen full of blood; enormous clots removed. An extrauterine pregnancy was found at the fimbriated end of the left tube. The point of rupture could be seen. Patient made an uninterrupted recovery.

Ross publishes a table of five similar cases—all he has been able to find—namely, one by Lawson Tait, one by Veit, J., one by Olshausen, one by Charles A. L. Reed, and this one, his own. Other cases have been reported, but these are all in which he deems the diagnosis sufficiently well established for acceptance.

USE AND ABUSE OF THE UTERINE CURETTE.

DORSETT, W. B., of St. Louis, (*American Practitioner and News,*) read a paper before the American Association of Obstetricians and Gynecologists, at its eighth annual meeting, with the above title. The more the author had used and seen used the uterine curette, the more he was impressed with the following ideas: that when used, the selection as to the shape and form of the instrument in a given case is not always a wise one; that a proper knowledge of its use should be obtained before trying to use it; that it is not a cure-all. Its use should be only in conjunction with other treatment. He looks upon the blunt curette (as sold in the shops) as a dangerous instrument. The instrument with a sharp-cutting edge, properly constructed, is a most useful one, and in the treatment of intrauterine inflammatory conditions is the *sine qua non* of success. In order to secure a good scraping instrument the sharp edge should stand at an angle of 60° to the shaft or handle. A greater angle will not scrape thoroughly, and a lesser angle is liable to incise the uterine wall unless used with a great deal of care. Cases of perforation of the uterine wall are on record, and he thinks they are due to want of care in the selection of the proper instrument. The dull or blunt curette should never under any circumstances be used.

CONSTIPATION IN WOMEN.

HOLMES (*Southern Medical Journal—Brooklyn Medical Journal,*) says a very frequent cause of disease in women is constipation. It

is remarkable how careless many women are in this respect. The mother should educate the girl from infancy that it is just as important to keep her bowels open as to sleep and eat. We find girls frequently going from three to five days, in some instances longer, without a movement from the bowels. Not only do they have from this a poisoning of the system from absorption of the liquid and gaseous contents of the bowels, the ptomaines or poisons developed in them from fermentation, producing extremely depressing effects on the nervous system, with great derangement of the stomach and assimilative organs, as shown in the pale faces, debility, neuralgia, headache, and a general feeling of exhaustion; but we get, in addition, from impacted feces in the rectum, uterine displacement, with its consequent disturbances in the pelvic circulation and with its general reflex neuroses. It is a well-known fact to gynecologists that the left ovary is oftener diseased than the right one. The left ovarian vein has no valve, and a slight pressure upon it prevents its emptying. Doubtless the pressure of a loaded rectum in this event is a prolific cause of disease of the ovary, especially the left.

TACHYCARDIA AT THE MENOPAUSE.

BALDWIN (*Brooklyn Medical Journal,*) says tachycardia may occur at any period of life. It is rare, however, before puberty and after fifty years of age. It is most often seen during the menopause. Early menopause predisposes to it, and especially if prematurely induced by surgical operation or disease. Its etiology is obscure. Stimulation of the sympathetic, hyperplasia of the stroma in sexual organs, the formation of scar tissue at the seat of operation in surgical cases, are some of the suggested causes. It may be paroxysmal or continuous; it may last for a few moments, hours, days or years. It may be precipitated by use of alcoholic liquors, strong coffee, anxiety or sleeplessness. The immediate results of a rapid heart are various; some experience grave apprehension and alarm, some are bathed in perspiration, some have epistaxis. The attack may disappear slowly or quickly. It may prove fatal. The heart always has a reserve power that will enable it to make twice its normal pulsations for a certain time, but when this reserve is exhausted, then comes the danger, for its nutrition has become seriously impaired.

Treatment: Opium and digitalis stand at the head, but often prove worthless. Combined and judiciously used they are often

successful. Nitro-glycerine, in combination with digitalis, is valuable. Galvanism has been the most effective agent, but was limited to the time of giving it. One sponge over the heart, the other over the left ear, in severe cases can render valuable service. General hygienic care advised, cool morning baths, the relief of indigestion and constipation; for the former, resorcin; for the latter, compound aloin pill.

GONORRHEA IN WOMEN.

THE course of gonorrhea in the female (*Philadelphia Polyclinic,*) is a rapidly progressing one, the infection quickly spreading from the vagina to the endometrium and then to the Fallopian tubes. Appreciating this fact and also that the danger to the patient increases in an alarming ratio with the progress of the infection, the aim of the physician would naturally be to prevent the spread and to destroy the disease in the parts already infected. When the disease is limited to the vagina, Dr. Talley recommends the daily washing of the mucous membrane with solution of *mercuric chlorid* (1-2000) and the filling of the upper part of the vagina with dry powdered *tannic acid.* A dry cotton tampon is then introduced to secure the retention of the powder. The cervix must be carefully watched for evidence of the infection of the endometrium, which will be shown by a red or granular condition of the external os and the flowing of mucus from the cervical canal. Should this be noticed, irrigation of the uterus with one or two gallons of a mild alkaline antiseptic solution at a temperature of 110° F., followed by the injection of equal parts of Churchill's iodin and carbolic acid, will, in the majority of cases, prevent the spread to the tubes.

A CLINICAL CONTRIBUTION TO THE STUDY OF THE LATERAL DISPLACEMENTS OF THE UTERUS.

ILL, EDWARD J., of Newark, read a paper on this subject before the American Association of Obstetricians and Gynecologists at Chicago. After reviewing the literature, he spoke of the importance of this abnormal condition, and thought it had been generally overlooked, the patient's symptoms being attributed to other ailments. He had collected from his last year's office case-book all cases of lateral displacements except such as had presented tumors. He showed that in 14.2 per cent. there had been lateral displacement.

He drew special attention to those cases which he considered to be congenital and where the pain was referred to the elongated broad ligament. The symptoms began early in the patient's sexual life, in severer cases progressing gradually to complete invalidism. He then related *in extenso* several histories. He described a typical case. The nonoperative treatment consisted in endeavoring to elongate the shortened ligament by the use of dry wool or oakum tampons pushed between the cervix and the ilium on the side of the shortened ligament, keeping the tampon in place by a second and third one. All this was to be retained for forty-eight hours. A hot douche, with the patient on her knees and elbows, twice daily, when the tampons were *in situ*, was also ordered. He related two cases of extreme suffering where total extirpation of the uterus, tubes, ovaries and broad ligament had been deemed advisable after years of unsuccessful treatment, in both of which the patients had been much relieved of their suffering by this method.

SHOULD INTRAUTERINE INJECTIONS OF GLYCERINE BE USED FOR THE INDUCTION OF LABOR?

HYPES, in a paper read at the annual meeting of the American Association of Obstetricians and Gynecologists, at Chicago, September, 1895, reports a case (*American Journal of Obstetrics*, December, 1895,) where glycerine was used to induce labor in a healthy young woman, 23 years old, who had no kidney lesion prior to the use of Pelzers' method, but who died of acute nephritis after its use. He then enters into a discussion of a number of other cases which have appeared, treated by this method, and of the effects upon the system produced by the absorption of a large amount of glycerine. Glycerine in these amounts (2½ ozs.) appears to alter the composition of the blood with the production of methemoglobin, and of disintegration of the red disks. Hematuria appears and the blood remains fluid after death. Evidences of intense congestion of various organs appear—kidneys, liver, stomach, bowels, brain and nervous system.

Dr. Hypes comes to the following conclusions: Intrauterine injections (of glycerine) are often inefficient, especially so in doses under fifty cubic centimeters. They are liable to be followed by all the ill effects—shock, air embolism, thrombosis, metritis and sepsis—of other intrauterine douches which have been used and abandoned during the past century. They may and sometimes do

produce glycerine poisoning—*i. e.*, decomposition of the blood corpuscles—resulting in diseases of various organs, but more especially in nephritis with hemoglobinuria. This method takes no consideration of the life of the child, and hence results in great mortality. Its use should be abandoned or the dosage reduced, especially in subjects with prior existing kidney affections.

THE INDICATIONS FOR OPERATION IN PUERPERAL SEPSIS.

McMURTRY, Louisville, Ky., read a paper with the above title at the Chicago meeting of the American Association of Obstetricians and Gynecologists, in which, *inter alia*, he said the efficiency of aseptic methods in preventing infection during the puerperium has been demonstrated by the recorded results of maternity hospitals. Since operative surgery a few years since disclosed the various lesions of pelvic disease, it has been known that pregnancy and the puerperal state may be complicated by preëxisting inflammatory diseases of the uterine appendages, tumors and septic accumulations inside the pelvis; chronic and circumscribed disease of this character may be converted into acute and diffuse inflammatory conditions by the trauma of labor. Puerperal sepsis may in this way be the result of preëxisting disease. This class of cases must necessarily be small, since women thus diseased are generally sterile. That such cases necessarily come within the scope of operative treatment will be generally conceded. The author then considers the indications and guides for operative interference. For practical purposes he divides puerperal sepsis into two general divisions:

(1) Those cases wherein systemic infection is marked and prominent with comparatively insignificant local manifestations; and (2) those wherein the local inflammatory lesions are conspicuous and general systemic infection less marked and secondary. In the first division, by the time the diagnosis is made, the mischief is done and nothing avails; in the second division, when the lesions are demonstrable to the skilled touch and local signs of known value, together with general symptoms of recognised significance are present, they form the basis of decisive action. The author closes his paper by deprecating empirical operations, such as hysterectomy, in the class of puerperal cases where the local symptoms are those of diffuse peritonitis without localisation of lesions.

Society Proceedings.

MEDICAL SOCIETY OF THE COUNTY OF ERIE.

Special Meeting, February 18, 1896.

Reported by FRANKLIN C. GRAM, M. D., Secretary.

A SPECIAL meeting of the Medical Society of the County of Erie was held in the rooms of the Buffalo Academy of Medicine, February 18, 1896. Dr. J. G. THOMPSON, the president, called the meeting to order at 4 P. M., and Dr. METCALFE acted as secretary until the arrival of Dr. GRAM, a few minutes later.

Dr. M. D. MANN read a letter from the committee on legislation of the State Medical Society, condemning a bill now pending in the assembly and known as the Stanchfield bill, No. 728. This bill purports to favor higher medical education by extending the time of study to four years; section 2 names several studies for examination, but prescribes no standard, thus leaving medical schools absolutely free to matriculate anyone who goes through the form of an examination; section 3 exempts certain matriculates from an entrance examination; section 4 makes provision in case of failure; section 5 does away with all safeguards as to age, character and instruction; section 6 postpones the restrictions of matriculation indefinitely if the candidate matriculates before 1897; and the final section may be construed to wipe out all the good and essential features of existing medical laws.

Remarks were made on the subject by Dr. Mann, Dr. H. R. Hopkins, Dr. Benedict, Dr. S. S. Greene, Dr. E. Storck and Dr. Lucien Howe. The opinion was expressed that while the four-years' term of study was a good feature, yet the remainder of the bill would more than counterbalance it; and further, that this was, perhaps, the entering wedge for further legislation, which might wipe out all the good which has been accomplished after years of work in that direction.

On motion of Dr. HOPKINS, the following resolution was unanimously adopted:

WHEREAS, The Medical Society of the County of Erie, assembled in special meeting for the purpose, has heard the assembly bill No. 728, entitled "An Act to provide for four years' study of Medicine, etc."; and

WHEREAS, This subject has been thoroughly discussed and considered; and

WHEREAS, This society is in hearty sympathy with any proposition to extend the course of study of medicine to four years, but holds it to be of prime importance that the preliminary standards for medical students remain high and the enforcement in the hands of the state as now; therefore be it

Resolved, That this society considers the above bill dangerous, retrogressive and inimical to the public health and the best interests of the medical profession, and that a committee be appointed to attend the hearing to oppose the same, and that we call upon our members of the legislature, senators and assemblymen, to use all honorable means to prevent its passage.

Dr. HOWE moved that a committee of three be appointed to attend the hearing at Albany, February 19th. This was carried and the Chair appointed Drs. Hopkins, Mann and Hubbell.

Dr. HOWE also called attention to the bill before the legislature proposing to legalise the practice of prescribing and fitting glasses by others than regular physicians in this state. A petition against this bill was signed by all the members present.

Health Commissioner WENDE asked all physicians who could, to attend the meeting of the ordinance committee of the board of aldermen and urge the adoption of an ordinance imposing the same conditions on others than qualified practitioners in regard to reporting contagious diseases and other illness.

The society adjourned at 5 P. M.

FORMULÆ FOR BLEPHARITIS.—Mittendorf recommends the following:

℞—Red oxide of mercury ..... grs. x.
Vaseline ..... ℥ss.

M. Sig.—Apply to the edges of lids at bed-time.

Or, ℞—Ammoniated mercury ..... grs. xx.
Powdered camphor ..... grs. x.
Vaseline ..... fl. ℥ss.

M. Sig.—Apply at night.

Or, ℞—Solution of subacetate of lead ..... gtts. x.
Ointment of rose water ..... ℥iij.

M. Sig.—To be used for more chronic forms of marginal blepharitis.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

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THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.

THE 90th annual meeting of this society was held at Albany, January 28, 29 and 30, 1896. The meeting fell a week earlier this year, and thus avoided the crowd that generally gathers at Albany during the first week of February. There were several reasons that conspired to make this meeting of unusual interest. In the first place, it was held at Jermain Hall, which is an improvement over the old place of meeting. Again, interest was manifested in an address delivered by President Eliot of Harvard College. He chose a topic which is one of increasing importance at this time—namely, that of medical education. He contrasted that of thirty years ago with the methods of today, and after reviewing its various periods of evolution, finally reached the climax of his discourse in asseverating that medical education in the future would begin with preparation at the sixth year of age and continue until graduation, which would not ordinarily occur until the twenty-fifth. He laid great stress on the importance of early preparation, and asserted that physicians should interest themselves in the public schools to the end that the course of study there may be made of a nature to prepare children and youths for the later walks of life.

The report of the State Board of Medical Examiners contains interesting data. During the year there had been 603 examinations, of which license had been granted in 482 cases and there had been 171 rejections. The Eclectics rejected one, or 12 per cent.; the Homeopaths eight, or 12 per cent. and the State Board 162 or 27 per cent. Most of the states accept the New York State license, but owing to the fact that the standards are not as high in

other states in all respects, it is not yet expedient for New York to exercise reciprocity in this matter.

Dr. A. Walter Suiter, of Herkimer, in discussing the Ainsworth instruction law that has been of late a matter of so much comment in the newspapers, and which provides for compulsory education with reference to alcohol and narcotics in the public schools, offered the following, which was adopted:

WHEREAS, This society is ever mindful of the evil results to individuals and to the community of the abuses of stimulants and narcotics and is ever ready to coöperate with and encourage anxious efforts to prevent such abuses; and

WHEREAS, This society is familar with the recent attempt to force upon our public-school system the task of teaching our children the chemistry, the toxicology and the pathology of alcoholic stimulants and narcotic habits; and

WHEREAS, This society is in entire sympathy with the probable motives of the promoters of this law, but has profound consideration in its inexpediency; therefore,

Resolved, That the committee on legislation is hereby instructed to bring about the repeal, or essential modification in the law relating to this subject.

We learn that it is highly probable that the law will be so changed as to make its provisions more in keeping with good sense and scientific knowledge.

Drs. George R. Fowler, of Brooklyn, and William C. Wey, of Elmira, were nominated to be State Medical Examiners to fill their own vacancies; and Drs. A. Walter Suiter and Willy Meyer were named as alternates.

The scientific part of the meeting was everything that could be desired, a full report of which has appeared in the weekly journals. An attempt was again made to change the place of meeting of the society on the plea that it would increase its efficiency, especially if it met in Buffalo or the western part of the state. This argument has been presented before, and the attempt has likewise been made to change the place of meeting, but it proved so disastrous to the interests of the society that it soon went back to the old way. The fact is, this society is a legal body, and is enabled to exercise much influence with reference to medical legislation and promote improvements in methods of medical education from the very fact that it meets in Albany during the session of the legislature.

The nominating committee presented its work in a very complete manner. Dr. James D. Spencer, of Watertown, was chosen as presi-

dent, Dr. L. D. Bulkley, of New York, vice-president; Dr. F. C. Curtis, of Albany, secretary, and Dr. C. H. Porter, of Albany, Treasurer. The usual standing committees were elected, and delegates were sent to other state societies and associations. Dr. H. R. Hopkins, of Buffalo, was chairman of the business committee and performed his work in a most satisfactory manner. The fact is apparent always, that in this society much depends upon the efficiency of the business committee for the success of its meetings.

The prize essay committee awarded a prize of $100 to Dr. A. L. Benedict, of Buffalo, for an essay on Neuroses of the Stomach. Dr. Benedict took the prize last year on an allied topic.

TOPICS OF THE MONTH.

THE health commissioner of Brooklyn deserves the commendation of all good citizens in his bailiwick. He has, according to the *Medical Record*, sent a communication to the pastors of churches having bells, requesting them and all church authorities exercising control over the matter to prevent the ringing of bells before 7 o'clock A. M., and in localities where complaints of invalids are brought to their notice, to restrict bell-ringing in the day-time to as few strokes as possible.

It appears there is an ordinance in Brooklyn which expressly prohibits the ringing of bells in such a manner as to become a prejudice or peril to the life or health of individuals. Speed the day when bell-ringing and other unnecessary noises may be restricted if not prevented in Buffalo!

THE office of coroner in this state has, in many instances, become a reproach to good government. The civilisation of the present has outlived the original purposes of the office, and while there are many conscientious coroners who do all they can to aid in the detection of crime, there are still others, especially in large cities, who fail in this respect.

Dr. W. G. Macdonald, of Albany, in a communication to the *New York Herald*, published February 14, 1896, cited a number of instances within his personal knowledge where justice has miscarried by reason of inefficient or neglectful administration of the office.

A bill was introduced in the assembly by Mr. Robbins, of Allegany, February 14, 1896,—No. 906, entitled, An act to abolish

the office of coroner and to provide for the performance of the duties now performed by coroners,—that deserves the careful and intelligent consideration of all citizens interested in the public welfare.

This bill was drawn, it is stated, through the collaboration of the State Bar Association, the medical societies of the State of New York, and a number of legal and medical gentlemen interested in this reform.

The object of this bill, as stated in its title, is to abolish coroners, coroners' juries, and coroners' physicians, and to create instead a medical examination system that will be removed from politics entirely, to be appointed by the several appellate divisions of the supreme court. A hearing on the bill has been set for March 4, 1896, at 2 o'clock P. M., and a full attendance of all in favor or opposed is desired. Copies of the bill may be obtained by addressing the Hon. Mr. Robbins, Assembly Chamber, Albany. We hope Buffalo will be well represented at the hearing.

It is now nearly two months since Professor Röntgen, of Würzburg, announced a discovery in photography that aroused the scientific world to a degree of excitement rarely before if ever equaled. It is not easy to disturb the quietude of every-day progress by even the most startling scientific discovery. We have become accustomed to such amazing advances in all directions in art and science that nothing could seemingly arrest attention, unless it were the thud of a comet striking the earth at point blank as it vaulted through space, and knocking us out of our appointed course. But the new photography of Röntgen has done it.

The newspapers and medical journals have been bristling with accounts of the application and experiments with the Röntgen rays—some in earnest and some in derision—while physicians, or more particularly surgeons, have sought to apply the principle to aid in the diagnosis of doubtful conditions. It seems likely at the present writing that a practical application of the new photography will be found in locating foreign substances, bullets, needles and such like, in the human body, but it is yet too soon to assert with positiveness just what place in medicine and surgery it will finally take. Meanwhile, the pertinent inquiry is not so much what the rays will do as, What are they ?

The *Literary Digest* has collected an excellent group of paragraphs from various sources that aim to answer this question, from which we extract the following:

Dr. Pupin, of Columbia College, in an interview with a reporter of the New York *Recorder*, said that "Dr. Röntgen's discovery, to put the whole story in a nutshell, is that the old cathode, or negative pole streamers, known to us for the last forty years, produce a strong fluorescence in a glass vacuum tube. Dr. Röntgen has discovered that, in addition to the fluorescent light, there is another form of radiation which penetrates all bodies, and casts a reflection or silhouette, varying in distinctness according to the character of the matter through which it passes, upon a sensitive photographic plate, placed beyond the object. What the possibilities of this new discovery may prove to be we cannot yet estimate. I should class it as one of the highest importance."

Prof. Edwin H. Hall, of Harvard University, in the New York *Sun*, sums up the facts concerning Röntgen's phenomena as follows:

"(*a*) That the so-called rays are sent out from the cathode of a vacuum tube, excited by a powerful alternating or rapidly interrupted current of electricity.

"(*b*) That these 'rays' act readily through wood and flesh, less readily through metals, except the lightest of metals, aluminum, and hardly at all through ordinary glass.

"(*c*) That the 'rays' are not perceptibly reflected or refracted.

"(*d*) That a medium, a solution of iodine, which absorbs the short ultra-violet rays, does not allow the Röntgen influence to pass, and a medium, a solution of alum, which absorbs long waves, does allow the Röntgen influence to pass. This is from Mr. Swinton, an English experimenter.

"(*e*) That the 'rays' are not affected by the magnet.

"The hypotheses are:

"(*a*) That the 'rays' are propagated by vibrations of greater length than those of ordinary light. Against this hypothesis we must put an experiment of Mr. Swinton.

"(*b*) That the 'rays' are ultra-violet rays. But ultra-violet rays are called such merely because they are refracted more than the violet rays, which are themselves the most refrangible rays of the visible spectrum. As the Röntgen 'rays' are apparently not refracted at all, it is difficult to see how they can be ultra-violet rays.

"(*c*) That they are rays of longitudinal vibration. It is hard to see how they would differ essentially from the electric oscillations, or displacement currents, set up in the space between the plates of an electric condenser, a Leyden jar, for instance, when the charge upon the plates is rapidly reversed. Therefore it seems that we already know something about the behavior of such vibrations, and there seems to be no reason whatever why 'rays' propagated by such vibrations should not pass with great readiness through glass. But the Röntgen 'rays' act through ordinary glass with great difficulty, and it is very doubtful whether they can be explained by means of longitudinal vibrations."

It is well to remember that the principle is yet in the infancy of its application in medicine and that published accounts of what

has been accomplished through its aid should be received with caution, unless from most reliable and well-authenticated sources.

Dr. Henry J. Jordan, of No. 21 West Nineteenth street, New York City, who was arrested recently, charged with violating the medical law in not having registered before practising medicine, was again brought before Magistrate Cornell in the Centre street court, February 18, 1896. His bail was increased to $2,000, which he furnished, and the case will now go to the grand jury.

It is a pleasant indication of the appreciation of our work to find the Journal's paragraphs so frequently appropriated by other magazines; but, we submit, that it would be pleasanter if our friends would also credit us with such as are borrowed from our columns. We are pleased to observe that many of our contemporaries scrupulously obey the inexorable laws of courtesy in this respect, but, sadly enough, there are some that do not. We hope it will not become necessary to name the latter class individually.

The so-called Christian Scientists appear to have had a field-day with the board of aldermen at the hearing on Thursday, February 20, 1896, but if the newspaper accounts are to be relied upon, championed though they were by able counsel in the person of the Hon. D. H. McMillan, they received a pretty square knock-out from the arguments of Dr. Hopkins, who proved himself more than a match for the ex-senator on this occasion. The fact is that when a lawyer appears as the paid attorney to argue for a medical fad he is placed at a disadvantage, and so is entitled to a fair amount of sympathy, even from the side of the opposite inclining. The Journal would suggest to the senator that it would appear more in keeping with his profession, sworn officer of the courts to uphold the laws as he is, if he did not attempt to undo the effect of the recent legislation on medical questions; for this is in effect what is being attempted by him and his clients.

For years the medical profession of the State of New York has been struggling to obtain and maintain a medical practice law that should advance the standard of medical education. It prescribes a preliminary training for medical students, a certain course of medical study, and a final examination by the state board of medi-

cal examiners before license to practise can be obtained. Now comes Senator McMillan asking that all this be set aside in favor of a few fanatics who call themselves Christian Scientists. If Christian Scientists are to practise medicine they must do so under the statutes of the State of New York. The argument that a person has a right to worship God according to the dictates of his own conscience has nothing to do with the question. The medical profession does not challenge these well-meaning, though misguided, people on this ground, but it does insist that they shall be made amenable to the same penalties as are the doctors and other people under the ordinances for the prevention and cure of infectious diseases.

This is a very important question that cannot be brushed away with a mere breath, and we are disposed to deal with it in all seriousness. The trouble with Christian Science is, that it is neither Christian-like nor scientific. The title "C. S. D." that one of its propagandists assumes, has no meaning in law and no force in fact. It is as illegal to assume it as it would be for a man to write M.D. after his name who had never received the title from a legally incorporated medical college. It is quite time that the community aroused itself to the fact that the Health Department of a great city like Buffalo is the custodian and conservator of its sanitary affairs. It must be permitted to adopt stringent measures to prevent the spread of infectious disease, and it must prevent the sacrifice of human life when threatened through the ignorance, obstinacy, fanaticism or incompetency of its citizens. It makes no difference whether these individuals call themselves Christian Scientists or whether they assume to practise any of the other forms of quackery, and it is high time for the authorities to interfere in the name of good sense and good government.

The National Public Association will meet in Buffalo next Autumn. An organization composed of scientific physicians from all parts of the continent. The purpose of the association is to devise means for the prevention of disease. Who ever heard of a national association of lawyers for the purpose of preventing litigation?

The argument that the doctors fear encroachments in their practice, hence a limitation of income, by the Christian Scientists is too silly to waste time over. In this great city, if the figures could be obtained, it would be found that the profession of medi-

cine in its care of the poor and in gratuitous services rendered suffering humanity lends to the Lord not one-tenth but rather one-third of the fruits of the year.

The fact is our genial and talented friend, Senator McMillan, has lately ranged himself on the wrong side of all the important questions that contribute to the welfare of our city. He and his Christian Science colleagues should remember that this is near the close of the nineteenth century, and not the age of miracles. It is the iron age of positivism, and not the Utopian era.

THE text of the ordinance proposed by the health department that has excited the ire of the Christian Scientists and their attorney is herewith submitted. We bespeak its careful reading, for we confess we are unable to discover anything in its verbiage that should not commend itself to the favor of every law-abiding citizen who is not so mentally warped by fanaticism as to be beyond the reach of reason.

Section 154. To limit the spread of contagious disease, and alleviate suffering among the poor, it is hereby provided that any minister, church member, or other person, in attendance upon the sick or injured, or who shall in any manner minister unto them, in the absence of a legally qualified practitioner of medicine, shall immediately and within six hours from first being called to attend, or from first attending any person, report such fact to the department of health, stating the name and residence of said person and the reason for such attendance.

This provision shall not apply to any case previously reported to the board of health.

A failure to comply herewith shall constitute a misdemeanor. Approved.

CHARLES L. FELDMAN, *Corporation Counsel.*
EDGAR B. JEWETT,
JAMES MOONEY, } *Board of Health.*
ERNEST WENDE,
Health Commissioner.

THE whole issue may be stated concisely as follows: The people, through their constituted authorities, have a right to know where every case of diphtheria, small-pox or other infectious or contagious disease is located. This knowledge is necessary for the protection of the community against the spread of these diseases. This information must be lodged with the health department at the very earliest moment possible. Every citizen in such an exigency must be consti-

tuted a private detective for the time being and for the purpose named. Physicians are not exempt from this duty, but, on the contrary, are especially charged with its performance under penalty for neglect. This duty is imperative, in that public health may be maintained at the highest possible standard.

It is not class legislation to make every citizen contribute to this end; and where the laws are inadequate to accomplish it, they must be amended to meet the defect. It is specious to discuss the subject from the contrary viewpoint. This is all that is asked and the community will not be satisfied with anything else. This is the whole case in a nutshell.

THE Stanchfield bill, which is introduced in the legislature and on which a hearing was had Wednesday, February 19, 1896, before the Public Health committee in the senate, is just now very much in evidence. Some one has asked to be defended or protected from his friends. The medical profession of the State of New York fought a hard battle to obtain a wholesome medical practice law, and now finds itself in an attitude of struggling to maintain this beneficent statute against the assault of prominent doctors who ought to be friends of the measure. At the hearing on Wednesday, however, strangely enough, out of twelve medical colleges in the state only one, Bellevue, favored the measure. Dr. E. D. Ferguson and Dr. John W. Gouley, founders and organisers of the New York State Medical Association, seemed also to be very active in the matter. Arrayed against the bill were the representatives of the medical society of the State of New York in the person of Dr. James D. Spencer, of Watertown, the president, and Dr. A. Walter Suiter, the chairman of its committee on legislation; Dr. Daniel Lewis, president of the State Board of Health; Dr. Charles E. Jones, ex-president of the State Homeopathic Medical Society; Professor Spooner, vice-president of the Eclectic Medical College; Dr. Didama, dean of the Syracuse Medical College; Dr. M. D. Mann, dean of the medical department of the University of Buffalo; Dr. W. G. Tucker, registrar of the Albany Medical College; Dr. J. H. Raymond, secretary of the faculty of the Long Island Medical College; Drs. Vander Veer and Watson, of the State Board of Regents; Dr. Eugene Beach, of the State Board of Medical Examiners; Professors Ward and Macdonald, of the Albany Medical College, and many others of prominence in the profession, representing all the schools of practice.

Each of the representatives of the various colleges present in turn pleaded for the existing law and spoke in terms of highest commendation of the excellent management of the Regents' office. The College of Physicians and Surgeons, of New York City—the medical department of Columbia University—sent in a protest against the bill signed by every member of its faculty. Physicians from all parts of the state sent words of protest against any alteration of the law, such as is contemplated in the Stanchfield bill. Prominent educators, including men like President Low, of Columbia, wrote the chairman of the committee, protesting against the proposed changes. We do not believe this dangerous bill will be allowed to pass the legislature, but should it so happen we are firmly of the opinion that Governor Morton will make short work in vetoing it when it comes before him.

A HEARING was held at the Fifth Avenue Hotel in New York, Saturday, February 15, 1896, before a committee of the State Medical Examining and Licensing Board, to determine the propriety of dividing the examinations for license. The friends of the proposed plan claim that students should be examined in the primary subjects, such as anatomy, physiology and chemistry as soon as they receive their pass-cards on these subjects in the colleges, and thus be left free to pursue the secondary, or practical branches during the remainder of their student life. The opponents of the plan consider the State examination as one simply to determine the equipment of the candidate for the practice of medicine, and not to be of a technical nature.

The committee, consisting of Dr. George R. Fowler, of Brooklyn, chairman; Dr. William Warren Potter, of Buffalo; and Dr. M. J. Lewi, of New York, secretary, listened to arguments pro and con for nearly three hours, and will make up their report on the subject as soon as possible. This will be transmitted finally to the regents for such action as they may deem proper.

THE New York State Civil Service Commission finds great difficulty in securing suitable candidates for the position of woman physician in the State hospitals. These positions are desirable ones, paying from $1,000 to $1,500 per year, besides giving ample opportunity for practice and study in nervous and mental diseases,

with pleasant home and associations. The examination advertised in January failed for lack of applicants.

This appears to be one of the places that women are not seeking, but in view of its advantages, it is difficult to understand the reason why it is allowed to go begging.

The condition of the water-supply of Buffalo, or rather the lack of supply, is a disgrace to the civilisation of the period. With an abundance of pure water within easy reach, with a knowledge of the engineering methods that should bring it permanently into every consumer's faucets, with an abundance of money to accomplish the feat, why on earth the inhabitants of this great city should be treated to a water famine by the board of public works, is a conundrum that we shall be glad to have somebody satisfactorily answer! One thing is certain: the people will not tolerate a repetition of the incompetence that has been manifested in the past. Pure water and plenty of it is a basic element in the sanitary economics of populous cities, and the people will have it or invoke retributive justice on the heads of those who are directly responsible for a failure to supply it. And they will not have it measured out to them through water-meters either!

Personal.

Dr. James D. Spencer, of Watertown, was elected president of the Medical Society of the State of New York at its last annual meeting. Dr. Spencer is one of the most prominent physicians in the state. He has been a member of the society for ten years, has been a loyal supporter of all the reforms it has inaugurated, and a regular attendant at its meetings. Dr. Spencer's father was vice-president of the society in 1883, and is still an active physician. The society has done itself distinguished honor in this election.

Dr. F. G. Novy, of Michigan University, the distinguished bacteriologist and, with Vaughn, author of Leucomaines and Ptomaines, will read a paper before the Microscopical Society in the Buffalo Library building, Monday evening, March 9, 1896, at 8.30, on Bacterial Toxins and Antitoxins. The officers of the microscopical club extend a cordial invitation to the medical profession to hear Dr. Novy and thus signify their appreciation of his visit to Buffalo.

Dr. Daniel Lewis, of New York, president of the state board of health, has resigned the editorship of the *American Medical Review*. This must be a severe blow to this new journal, that started out so propitiously a few months ago.

Dr. Max Keiser, of Buffalo, recently interne at the Sisters of Charity Hospital, has gone to Europe and will devote himself to hospital work and medical study at Vienna during the next three years.

Obituary.

Dr. Joseph Jones, one of the most noted southern physicians and scientists, died February 18, 1896, at his home in New Orleans. He was born in Georgia in 1833, was graduated at Princeton in 1853 and at the medical department of the University of Pennsylvania in 1855. He was professor of chemistry in the Medical College of Savannah in 1856, of natural philosophy in the University of Georgia in 1858, and of chemistry in the Medical College of Georgia from 1859 to 1865. From 1862 to 1865 he served as surgeon in the Confederate Army. From 1866 to 1868 he was professor of medicine in the University of Nashville, and from 1869 up to a few years ago was professor of chemistry and clinical medicine in Tulane University.

He was president of the Louisiana State Board of Health from 1880 to 1884, and while serving in this capacity was successful in excluding yellow fever from the Valley of the Mississippi. Dr. Jones devoted his life to the investigation of the causes and prevention of disease in civil and military hospitals, and was a prolific writer on the subject of his experiments. He was the author of a score of published works, besides innumerable pamphlets and addresses. In addition to his medical works he published a book on the agricultural resources of Georgia and several on Southern Indians. He married a daughter of Lieutenant-General (Bishop) Leonidas Polk, C. S. Army.

Dr. John Howard Ripley, of New York, died at Norma, Fla., February 14, 1896, aged 58 years. Dr. Ripley was born in South Coventry, Conn., May 16, 1837. He came to New York in 1861 and entered the medical department of the University of the City

of New York, but before finishing his course he entered the army, and remained in the service until the close of the war, when he returned to New York and was graduated in the class of 1866. He began practice at once and soon took a high place in the profession. He became an acknowledged consultant in general practice, his fame extending beyond New York, and he was frequently called to neighboring cities.

Some time ago he was called to Hartford in consultation, and on the journey was attacked with the grip. He returned to New York quite ill, but with that devotion to his work for which he was well known, he refused to rest, and continued to perform the duties of his extensive private practice and his hospital service. He was finally prevailed upon by his life-long friend, Dr. George F. Shrady, to quit work and go south for rest and recuperation, but his illness had already made such inroads that the more genial climate could not restore his health. Dr. Ripley is survived by a widow, one son and two daughters. His remains were brought to New York for interment.

Dr. W. W. Jaggard, of Chicago, professor of obstetrics in the Chicago Medical College, died January 30, 1896, at Philadelphia, of acute appendicitis, for which an operation was undertaken. For some months previous his health was greatly impaired, following upon the death of his wife. The *Medical Recorder* in writing of the sad event says :

> The termination of his life ends the career of a man of great brilliancy of intellect and extraordinary teaching powers. Every one who came in contact with Dr. Jaggard recognised at once his mental as well as his physical forcefulness, and his control of people and patients was most remarkable. He was educated at the University of Pennsylvania, spent some time in the naval service of the United States and after coming to Chicago became identified with the Chicago Medical College and a number of hospitals. He was forty years of age and leaves one child.

Dr. James E. Reeves died at Chattanooga, Tenn., January 4, 1896, of what was supposed to be cancer of the liver. Dr. Reeves was born in Rappahannock county, Va., 1829. He graduated from the University of Pennsylvania in 1860. He lived for some years in Wheeling, W. Va., and then removed to Chattanooga, where he resided until his death.

Dr. Reeves, says the *Southern Medical Record*, was one of the founders of the American Public Health Association and was its president in 1885. His works in microscopy and hygiene are well known. His contributions to the medical press were numerous and covered a wide range of subjects. About a year ago he published a small work on the use of the microscope. Dr. Reeves was a gentleman of the old régime, and his death will be a grievous loss to many friends in and out of the profession.

Dr. Cornelius George Comegys, of Cincinnati, died at his residence February 10, 1896, aged 79 years. He was a man of conspicuous prominence in his profession, a valued citizen and an active man in the social circle. He was prominent in medical society work, local, state and national, and frequently contributed to medical literature. He worked up to the last and fell ill with grip, which, together with its complications, proved too great for his naturally strong constitution, now necessarily weakened by advancing years. He leaves a name to be envied and an example to be emulated by all young physicians.

Dr. Alexander S. Hunter, of New York City, died at his residence at Spuyten Duyvil, to which he had lately moved, February 13, 1896, aged 55 years. Dr. Hunter was a prominent member of the New York Academy of Medicine, of the medical society of the county of New York, and of various other medical organisations. He was an alumnus of the medical department of the University of the City of New York, class of '63, and had obtained eminence in his profession. Of late years his chief renown was in the departments of obstetrics and gynecology.

Society Meeting.

The Buffalo Ophthalmological Society was organised last month for the purpose of studying and discussing ophthalmological subjects and cases.

Its constitution provides for regular and associate members. Regular members must have had at least five years of ophthalmic practice and shall consist of the original members and such as are elected from the associate membership. The associate members must have had at least three years of ophthalmic practice, and are

entitled to all the privileges of the society, except to vote and hold office.

Meetings will be held on the third Monday evening of each month for eight months of each year, beginning October.

The first regular meeting was held at the office of Dr. Abbott, the senior ophthalmologist of Buffalo, February 17, 1896. Dr. Howe described a self-retaining fixation forceps; Dr. Hubbell reported a case of congenital growth from the right inner canthus, and Dr. Starr related some of his experiences in "cathode" photography.

The next meeting will be held Monday evening, March 18, 1896.

Book Reviews.

THE PRINCIPLES AND PRACTICE OF MEDICINE. Designed for the use of Practitioners and Students of Medicine. By WILLIAM OSLER, M. D., Fellow of the Royal College of Physicians, London; Professor of Medicine in the Johns Hopkins University and Physician-in-chief to the Johns Hopkins Hospital, Baltimore, etc., etc. Octavo, pp. xvi. —1,143. Second edition. New York: D. Appleton & Co. 1895.

When Osler's first edition appeared we devoted considerable space to its review, [see p. 754, Vol. XXXI., July, 1892,] and now purpose merely to call attention to changes in the present edition, or to points overlooked in the former notice. The general plan of the work remains the same. The first section is devoted to the consideration of specific infectious diseases, and this is divided into thirty-one subsections, comprising 291 pages.

Typhoid fever, as might be expected, heads the list, and is a subject always fraught with interest. Osler asserts that in cities the prevalence of this disease is directly proportionate to the inefficiency of the drainage and the water supply; and that there is no truer indication of the sanitary condition of a city than the returns of the number of cases of typhoid fever. This has been again and again demonstrated and Buffalo is a striking example of the truism. The hydrotherapy of typhoid receives due attention and Osler asserts that for the fever and its concomitants there is no treatment so efficacious. Directions are given, and substitutes for the bath, when it is impracticable, are suggested. Antipyretics, especially the recent ones, are very properly condemned.

Constitutional diseases occupy section two, which is divided into twelve subsections. Diseases of the digestive system cover the next section, consisting of 161 pages, divided into twelve subsections. The evil effects of mouth-breathing are described in treating of tonsilitis, and the excision of the tonsils is advised when they are large and the general state of health is influenced

by them. In the treatment of constipation we miss any allusion to the high enema in the knee-chest posture, that often serves a good purpose in dislodging scybala and large fecal accumulations.

The next section is devoted to the consideration of diseases of the respiratory system, to which about 100 pages are appropriated. Roe, of Rochester, and Daly, of Pittsburg, are credited with the demonstration that hay fever is generally associated with nasal disease. Osler says that in the etiology of hay fever three elements prevail—a nervous constitution, an irritable nasal mucosa and the stimulus. Just what the latter is or may be he does not state.

Following this section comes diseases of the circulatory system, to which, also, about 100 pages are assigned. Osler is quite unsatisfactory in the therapy of these affections, especially of the cardiac neuroses. However, his description is good and in pathology he rises to the occasion. In section six, diseases of the blood and ductless glands are handled with ability, and so, too, are diseases of the kidneys in section seven. The importance of a more complete understanding of these diseases, both as to pathology and treatment, as our civilisation changes and moves further from the primitive, appears to be appreciated.

The next three sections—eight, nine and ten—are devoted to the nervous system, section eight treating of nervous diseases proper, section nine of muscular atrophies, while the intoxications, sunstroke and obesity form the substance of section ten. In section eight, under the head of general introduction, is given a very plain and concise description of the "neuron," and the relation of one neuron to another, enabling the reader to understand fully the latest theory in regard to nerve units. The paths of the different tracts, with their respective neurons, is mapped out clearly, aided by several excellent diagrams, modified after Van Gehuchten. The lesions affecting the cranial nerves and the peripheral nerves are next discussed and the treatment reviewed, embracing the latest suggestions from various writers. The author has, in great part, escaped the adverse criticism of neglecting the "treatment," for all through these chapters the treatment of the various lesions and affections is taken up at greater length than in many of the special works on nervous diseases.

The diseases, acute and chronic, of the spinal cord are discussed in the author's masterly way, embracing the latest theories and pathological findings, especially of the French and German schools. The treatment of locomotor ataxia by anti-specific remedies is deprecated, as it tends to hasten the disease rather than retard or mitigate it, and in this view the author coincides with Gower's opinion. Apparently not much credence is placed upon Gray's reputed cures, as the author has never seen a case of this disease ever cured. The fact is mentioned and is borne out by cases, now being reported the world over, the optic nerve atrophy, one of the most serious events in the disease, has this hopeful aspect—that incoördination rarely follows and the progress of the disease may

be arrested. The author states that suspension has been practically abandoned, as the effect seemed to have been more psychical than physical or real.

Part IV., of chapter eight, is devoted to topical diagnosis of diseases of the brain and under the entire description of cerebellar diseases is taken from Dr. W. C. Krauss's paper on the cerebellum, read at the state medical society in 1895.

The chapters on the membrane and blood-vessel lesions of the brain are carefully gone over and receive proper attention; they have of late been slighted in some of the special volumes on nervous diseases. Under general and functional diseases are included acute delirium, chorea, Parkinson's disease, epilepsy, hysteria, and the like. The author commends White's idea of operation, *per se*, in the treatment of epilepsy, but relies mostly on the bromides. The Flechsig, or opium treatment, is not mentioned, the author doubtless having seen no good results follow its use.

Tetany is not considered as an hysterical disease as some of the French writers hold, but is due, according to the author, in many cases to disturbance in the thyroid function, debility, epidemic causes and gastro-intestinal disturbances.

Basedow's disease is placed among the diseases of the thyroid gland—following the theory of Möbius and Greenfield that it is a disease of this gland in antithesis to myxedema. This theory will be sharply contested by the supporters of the medulla and sympathetic nerve theories, with fair prospects of a draw regarding its true etiology.

The last chapter is devoted to alcohol, opium, lead, arsenic, ptomaine and germ poisoning, obesity and sunstroke, and are excellently portrayed. The author has given American writers due attention, and, at the same time, has not slighted foreign authorities. In this respect he differs from the European writers who believe that the subject under discussion is a national one and not international.

The changes have been so numerous in this edition that it becomes almost necessary to discard the former one as a treatise of reference. Not a section has escaped revision, additions, or changes in some respect, many of which are material.

This treatise of Osler will serve to maintain his popularity as a teacher, and it will become further established as a text-book as time advances and its excellent qualities become better understood.

A TREATISE ON NERVOUS AND MENTAL DISEASES. By LANDON CARTER GRAY, A. M., M. D. Second edition, revised and enlarged, with 172 illustrations and three colored plates. Octavo, pp. 733. Philadelphia: Lea Brothers & Co. 1895.

The first edition of this valuable book was reviewed in the March, 1893, number of the JOURNAL, page 504, and was very carefully scrutinised and commented on. The new edition follows

closely on the lines mapped out in the preceding, some additions having been made, the bibliographical references omitted, the glossary extended and the science of neurology brought down to the time of going to press. One fault with the first edition was the brevity of the chapters on mental diseases, also the entire omission of some chapters necessary for a complete understanding of psychiatry. These have been added, particularly the chapters on dementia, confusional insanity and delirium. An interesting chapter on the general principles of massage has been added, while the special applications are given under the separate diseases. No special notice is made of hydrotherapy, because, as the author remarks, he is not yet convinced that it is practical outside of the larger cities or that it has more value than mere cleanliness. Upon this point neurologists and hydrotherapeutists will hardly agree with the author. The therapeutical suggestions, although developed to their broadest in the first edition, are one of the features in this new edition, and nowhere in medical literature is the treatment of diseases more carefully considered than in this work. Not only are the medicinal and non-medicinal agents presented, but also those hygienic and dietetic measures which are often the physician's best reliance.

Many of the illustrations in the first edition were either faulty or imperfect. These have all been remedied, either reëxecuted or new ones substituted and the number considerably increased. The index is such a one as the busy practitioner delights to find, complete in every detail. Of the many excellent and worthy textbooks on neurology published within the past five years, none are superior to Gray's and the physician makes no mistake in adding it to his medical library. W. C. K.

A SYSTEM OF SURGERY. By American authors. Edited by FREDERIC S. DENNIS, M. D., Professor of the Principles and Practice of Surgery, Bellevue Hospital Medical College, New York; President of the American Surgical Association, etc.; assisted by John S. Billings, M. D., LL. D., D. C. L., Deputy Surgeon-General, U. S. A. To be completed in four imperial octavo volumes, containing about 900 pages each, with index. Profusely illustrated with figures in colors and in black. Volume III., 908 pages, 207 engravings and ten colored plates. Price, per volume, $6.00 in cloth; $7.00 in leather; $8.50 in half-morocco, gilt back and top. For sale by subscription. Full circular free to any address on application to the publishers, Lea Brothers & Co., Philadelphia.

Volume III. of Dennis's Surgery is devoted largely to the various specialties. In it one finds the diseases of the larynx, eye, ear, skin, genito-urinary organs, syphilis, etc., considered by specialists of international repute in their respective lines.

The articles upon the ear, eye and skin are all concise but complete monographs. The chapter upon the ear by Dr. Gorham Bacon is a most admirable presentation of a subject which is

always of great interest to the general surgeon. The peculiar value of this article lies in the fact that it has been written by one who is a general surgeon as well as an ear specialist. We find, therefore, not only the diseases of the ear, but such sequelæ as mastoid diseases, brain abscess and sinus-thrombosis thoroughly treated. In limited compass the author has given us an article along the lines laid down by Macewen in his recent masterly work upon the diseases of the brain and spinal cord. We cannot refrain from expressing the wish that there might be more specialists like the author whose writings deserve a place in the library of every general surgeon.

Another most instructive and able chapter is that upon genito-urinary diseases, by Dr. White. In the pages of this article may be found a large fund of knowledge and experience, combined with a terse and happy method of expression, for which the author is justly noted. The whole tone of the chapter is positive and convincing, and although frequently radical will be found safe and useful in its teaching. The article on syphilis by Dr. Taylor is a most admirable exposition of this interesting and important subject. All the salient features of the malady have been concisely and judiciously combined and presented so as to give the writer a pretty thorough knowledge of the subject. The volume is, of course, similar in dress to those preceding, and in every way maintains the enviable reputation of the world-known house which has issued it. J. P.

AN INTRODUCTION TO PATHOLOGY AND MORBID ANATOMY. By T. HENRY GREEN, M. D., F. R. C. P., Physician and Special Lecturer on Clinical Medicine at Charing Cross Hospital, and Physician to the Hospital for Consumption and Diseases of the Chest, Brompton. Seventh American from the eighth English edition. Revised and enlarged by H. Montague Murray, M. D., F. R. C. P. Illustrated by 224 engravings; pp. 598. Philadelphia: Lea Brothers & Co. 1895.

In the November, 1889, number of the JOURNAL, p. 251, was reviewed at some length the sixth American edition of this favorite work and its salient points commented on. No such review is necessary for this volume, as the changes are few and the increase in size is due mainly to the addition of new illustrations. Some chapters have been remodeled and some entirely rewritten, especially the chapter on diseases of the nervous system. This has been contributed by Dr. Mott and although concise and abbreviated is a good review of the pathological findings of the cord and brain. Perhaps not enough attention has been given to the neuron theory and its change in disease, but the author pleads lack of space. The engravings are excellent and are nearly all photographed from the writer's own specimens.

The chapter on vegetable parasites, consisting of nearly 100 pages, includes the latest additions to our knowledge of germ-life.

The chapters on tumors and inflammations are in the main similar to those in the preceding edition with few additions. The author belongs as yet to the followers of Metchnikoff and the phagocytic theory and reviews this writer's work very clearly.

The enlargement of the volume will tend somewhat to keep it from the medical student, but will make it more acceptable to the profession at large.

The typographical work is on a par with the high plane attained by this favorite house. W. C. K.

THE YEAR-BOOK OF TREATMENT FOR 1896. A Critical Review for Practitioners of Medicine and Surgery. Duodecimo, 484 pages. Cloth, $1.50. Philadelphia: Lea Brothers & Co., Publishers. 1896.

This annual, which has become so popular with many physicians is out with great promptness for the current year. It contains the usual synopsis of accepted methods of treatment on almost every disease that is likely to affect the human race, and presents in easily accessible form the advances made during the past year in the several branches of medicine and surgery. Besides, it presents a classified list of new books of value, medical instruments and surgical appliances, together with pharmaceutical and dietetic novelties, as well as an index of subjects. Taken altogether, it is one of the most complete books of its kind and will find an assured market.

SPECTACLES AND EYEGLASSES, THEIR FORMS, MOUNTING AND PROPER ADJUSTMENT. By R. J. PHILLIPS, M. D., Adjunct Professor of Diseases of the Eye, Philadelphia Polyclinic and College for Graduates in Medicine; Ophthalmic Surgeon to the Presbyterian Hospital in Philadelphia, etc. Duodecimo, pp. 106. with forty-nine illustrations. Second edition, revised. Price, $1.00. Philadelphia: P. Blakiston, Son & Co. 1895.

The title of this book explains exactly what it contains. In it will be found much practical and reliable information which every ophthalmologist and optician should acquire. The new systems of enumeration of prisms have been incorporated in this edition and several new tables and cuts have been added. A. A. H.

BOOKS RECEIVED.

Medical Jurisprudence, Forensic Medicine and Toxicology. By R. A. Witthaus, A. M., M. D., and Tracy C. Becker, A. B., LL. B., and a staff of collaborators. In four royal 8vo volumes. Volume III. Forensic Medicine (continued). New York: William Wood & Co. 1896.

Twentieth Century Practice. An International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by Thomas L. Stedman, M. D., New York City. In twenty volumes. Volume VI.: Diseases of the Respiratory Organs. New York: William Wood & Co. 1895.

Johns Hopkins Hospital Reports. Volume V. Contents: I. Malarial Fevers of Baltimore; II. Study of Some Fatal Cases of Malaria; III. Studies in Typhoid Fever. Baltimore: The Johns Hopkins Press. 1895.

Color-Vision and Color-Blindness. A Practical Manual for Railroad Surgeons. By J. Ellis Jennings, M. D. (University of Pennsylvania), formerly Clinical Assistant Royal London Ophthalmic Hospital (Moorfields); Lecturer on Ophthalmoscopy and Chief of the Eye Clinic in the Beaumont Hospital Medical College; Ophthalmic and Aural Surgeon to the St. Louis Mullanphy and Methodist Deaconess Hospitals; Consulting Oculist to the Missouri, Kansas & Texas Railway System; Fellow of the British Laryngological and Rhinological Association. Illustrated with one colored full-page plate and twenty-one photo-engravings. Crown 8vo, 110 pages. Cloth, $1.00 net. Philadelphia: The F. A. Davis Co., Publishers. 1896.

Syphilis in the Middle Ages and in Modern Times. By Dr. F. Buret, Paris, France. Translated from the French, with notes, by A. H. Ohmann-Dumesnil, M. D., Professor of Dermatology and Syphilology in the Marion Sims College of Medicine; Consulting Dermatologist to the St. Louis City Hospital, to the St. Louis Female Hospital; Physician for Cutaneous Diseases to the Alexian Brothers' Hospital; Dermatologist to Pius Hospital, to the Rebekah Hospital, to the St. Louis Polyclinic and Emergency Hospital, etc., etc. Being Volumes II. and III. of Syphilis Today and Among the Ancients, complete in three volumes. Duodecimo, 300 pages. Extra cloth, $1.50 net. Philadelphia: The F. A. Davis Co., Publishers. 1895.

The Principles of Bacteriology. A Practical Manual for Students and Physicians. By A. C. Abbott, M. D., First Assistant, Laboratory of Hygiene, University of Pennsylvania, Philadelphia. Third edition, enlarged and thoroughly revised. Duodecimo, 492 pages, with ninety-eight illustrations, of which seventeen are colored. Cloth, $2.50. Philadelphia: Lea Brothers & Co., Publishers.

Atlas of Traumatic Fractures and Dislocations. With a Brief Treatise. By H. Helferich, M. D., Professor at the University of Greifswald. With 166 illustrations, after original drawings by Dr. Joseph Trumpp. New York: William Wood & Co. 1896.

Proceedings of the Twenty-first and Twenty-second Annual Meetings of the Oregon State Medical Society, held at Portland, May 31, June 1, 2, 1894, and June 11 and 12, 1895. Volume XX. Edited by E. F. Tucker, M. D., secretary. Portland: 1895.

Formulaire des Médications nouvelles, par le Dr. H. Gillet, ancien interne des hôpitaux de Paris, chef du service des maladies des enfants à la Polyclinique de Paris. 1 vol. in 18 de 280 pages, avec fig., cart. 3 fr. Paris: J.-B. Baillière et Fils, 19, rue Hautefeuille (près du boulevard Saint-Germain). 1896.

An Atlas of the Normal and Pathological Nervous Systems, together with a Sketch of the Anatomy, Pathology and Therapy of the same. By Dr. Christfried Jakob, practising physician in Bamberg; formerly First Assistant in the Medical Clinic at Erlangen. With an introduction by Prof. Dr. Ad. v. Strümpell. Translated and edited by Joseph Collins, M. D., Instructor of Mental and Nervous Diseases at the New

York Post-Graduate Medical School. New York: William Wood & Company. 1896.

A Manual of Medical Jurisprudence and Toxicology. By Henry C. Chapman, M. D., Professor of the Institutes of Medicine and Medical Jurisprudence in Jefferson Medical College of Philadelphia; Member of the College of Physicians of Philadelphia, etc., etc. Second edition, revised. With fifty-five illustrations and three plates in colors. Saunders' New Aid Series. Small 8vo, pp. 254. Price, $1.50. Philadelphia: W. B. Saunders. 1896.

Literary Notes.

THE report of the Commissioner of Education, Vol. II., soon to issue, will contain a chapter on Medical Education by A. Erskine Miller, that cannot fail to interest all physicians who believe in improved methods of teaching. Prof. Miller says that New York has gone further than any other state to prevent the licensing of persons not qualified. Let New York continue to maintain this proud position, by advancing the standard and not lower it as has been urged by some. Four years will soon be the minimum limit of collegiate study in this State.

DR. H. BRONSON GEE has resigned the editorship of the *New York State Medical Reporter*, and the management has secured the services of Dr. Charles Wilson Ingraham, of Binghamton, to take charge of the editorial department of this publication.

SEVERAL new journals have appeared since the beginning of the new year. Among them we may mention *Langsdale's Lancet*, Kansas City, Mo., John M. Langsdale, editor and owner; *The Clinical Recorder*, New York City, Wm. S. Gottheil, M. D., editor, and *The Medical Council*, Philadelphia, J. J. Taylor, M. D., editor and publisher. We wish them all success.

JUST as we are printing this page the *State Hospitals Bulletin* presents itself. It is to be a quarterly report of clinical and pathological work in the state hospitals for the insane, and is published at Utica by authority of the state commission in lunacy. The president, the hospital superintendents and director of the pathological institute are the editors. Drs. Wise, Pilgrim and Talcott compose the editorial committee and the assistant physicians and

medical internes of the several state hospitals are collaborators. The first number is a handsome specimen of medical magazine making.

L'Union Medicale du Canada appeared in a new dress at the beginning of the year. It is enlarged and in every way much improved. Our excellent contemporary begins its twenty-fifth year in good form.

THE *Sanitary Era* has put itself into a new dress, changed its name and form, and will hereafter be known as *Modern Medical Science*. This is a good title and we hope it will indicate the contents of the magazine.

P. BLAKISTON SON & COMPANY, of Philadelphia, announce a book on Appendicitis, by John B. Deaver, M. D., assistant professor of applied anatomy, University of Pennsylvania; assistant surgeon to the German Hospital, etc. The book will be arranged in a practical and systematic manner. The history, etiology, symptoms, diagnosis, operative treatment, prognosis and complications of this disease will be given in the order named. It will contain about forty illustrations of methods of procedure in operating and typical pathological conditions of the appendix, the latter being printed in colors.

DON'TS for consumptives, or the scientific management of pulmonary tuberculosis, is the title of a book which, under the authorship of Dr. Charles Wilson Ingraham, is about to be issued by the Medical Reporter Publishing Company, of Rochester, N. Y. Price, $1.75.

Miscellany.

MEDICAL EXPERT TESTIMONY.

THE special committee appointed at the last meeting of the medical society of the State of New York to report upon the most feasible plan by which the present methods of introducing medical expert testimony can be improved, submits the following report:

Your committee recognising the difficulties which lay in the way of formulating any plan within the constitution of the state, have cor-

responded quite extensively with qualified members of both the legal and medical professions, and believe that in submitting the following preamble and resolution, it presents a conscensus of such opinions held with reference to this subject, which under present constitutional restrictions affords the best method of obtaining medical expert testimony.

WHEREAS, The present method of obtaining medical expert testimony tends to lessen the value of such testimony and to bring the medical profession into disrepute; therefore, be it

Resolved, That the medical society of the State of New York would recommend the enactment of a law by the legislature providing for the appointment of experts by the courts, and that only physicians of repute in the particular branch of medical science to which the question calling for expert opinion relates, shall be appointed; that the function of the experts so appointed shall be advisory, and the number thus appointed shall be such as to adequately represent the court, and both sides of the question at issue, as in the judgment of the court shall seem necessary; that the experts so appointed shall have full and free access to all the evidence in the case, as well as access to the plaintiff or defendant in person as the case may be, if the issue involves his mental or physical state. That the expert shall submit to the court for transmission to the jury a report in writing, setting forth their conclusion and the facts in evidence on which such conclusion is based; that the cross-examination of such experts shall be limited to the facts and opinions embraced in their testimony as embodied in their report, and that their compensation shall be fixed by the court at a rate that is reasonable for professional services of such a nature.

Respectfully submitted,

J. B. RANSOM, M. D.,
CARLOS F. MCDONALD, M. D.,
H. E. ALLISON, M. D.,
E. D. FISHER, M. D.,
S. B. WARD, M. D.,
Committee.

MESSRS. SCHULTZE-BERGE & KOECHL, of New York, announced a change in their firm name. This well-known house will hereafter be styled Victor Koechl & Co. All the business relations, foreign and domestic, of the firm are retained, and the change is more in name than in reality, as Mr. Koechl has been the head of the house for some years.

This house has recently issued a brochure of forty pages on antitoxin, which explains almost every feature of the manufacture and use of serum for preventive inoculation use. This same firm announces also the publication of a new monthly entitled Therapeutic Progress, which will be sent regularly to any physician who sends his name and address to 79 Murray street.

BUFFALO MEDICAL JOURNAL.

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Original Communications.

FIRST USES OF CHLOROFORM AND ETHER IN BUFFALO.[1]

BY JOHN HAUENSTEIN, M. D., Buffalo, N. Y.

IT MAY be because old men are generally considered garrulous and to have always something to say, that I have been charged by the committee of arrangements to give a brief account of the first uses of chloroform and ether in Buffalo and also of personal reminiscences of noted men of the profession at the commencement of my professional career. I will endeavor to discharge my trust as best I can.

The wonderful progress of the knowledge of medicine through the discoveries and introductions of new resources and means of combating disease, during the past half century, entitles this period to the appellation of the revolutionary era of the medical sciences. I will mention but a few of the more prominent subjects, such as auscultation and its branch, percussion, chloroform and ether, antisepsis, and, lastly, bacteriology. Besides, there have been added to the materia medica numerous valuable and potent medicines. My instructions, however, do not permit me to treat of all these subjects, yet I cannot forego the temptation of mentioning some of them, particularly auscultation when first practised in this city.

The great epoch, about the same time that I engaged in the practice of medicine, remarkable as a most important acquisition in diagnosis, particularly of heart and lung diseases, was that of the introduction of auscultation and its branch, percussion. Today it seems strange that such an important discovery should have been

1. Read before the Medical Society of the County of Erie, January 14, 1896, on the occasion of its seventy-fifth anniversary.

so long on its way to this country, for in 1819 already Laennec published his great work on auscultation, and yet when I attended my last term of lectures, in Geneva, in the winter of 1843 and 1844, no instructions had been thus far given on the subject. As an attempt, a negro was placed upon the platform, with chalk marks on his chest, intended to locate the different regions, the students being seated afar off, and having no opportunity given to apply their ears to the negro's chest.

When I returned, in January, 1844, from Geneva, there was not one physician in this city then who knew anything of the art of auscultation, unless he may have chanced to read some extracts from the *Journal de Médecine*, then edited by Laennec in Paris. Paris was then, and up to the time when Berlin succeeded to establish its claim, the center of medical science.

When Dr. George Burwell returned from Philadelphia, where he graduated and served a term as interne in the hospital, he was quite distinguished among the physicians here, having acquired some knowledge of auscultation and percussion. "George," as he was familiarly called, was frequently summoned by the different physicians to diagnosticate cases of heart and lung diseases which they were treating. From this we are to conclude that auscultation was beginning to be taught in some of the colleges of the larger seaboard cities. But I have been charged to say something more particularly about the first uses of chloroform and ether.

The next most important discovery came to us from over the Atlantic with more speed. In 1847, the introduction of chloroform as an anesthetic, by Dr. Simpson, of Edinburgh, marks one of the most important events in the history of medicine. If I were able to give you a pen picture of the scene that occurred in the operating room before the advent of chloroform, when an important operation was being performed, you would consider yourselves favored to be permitted to practise surgery after the introduction of anesthetics. The writhing and moaning of the patient, the almost convulsive efforts to release himself from the grasp of a half dozen assistants, was a scene that appealed to the strongest heart.

How different is the picture now presented! The patient lies calm and oblivious to all that is going on with and around him, occasionally making remarks as though he were enjoying pleasant company. Only once in a while we meet with an exceptional subject showing signs of a combative sort. After the operation and the

discontinuance of the administration of the anesthetic, the patient does not remember having suffered any pain.

Of course, when a new remedial agent makes its first appearance, it is experimented with in all kinds of cases, and such was the way with me. Soon after chloroform came to be used as an anesthetic I was called to a patient suffering from tetanus, caused by a wound near the knee-joint, inflicted with an adze. The young man was perfectly rigid. Two men, one taking hold of the back part of his head, the other of his heels, could carry him from one bed to another like a rail. I kept the patient more or less under the influence of chloroform for a number of days and he got well. I was afterward reproached by a number of the then older physicians for not having shown them the case. I have since regretted my neglect, but I innocently considered the use of chloroform then, in such cases, as a matter of course.

That no pain whatever is experienced during an operation, when under the influence of chloroform, I can testify from personal experience. About twenty years ago, in the city of New York, when returning from the Centennial Exposition in Philadelphia, I was entertained by friends, and during the enjoyment of dinner my hernia, with which I had been troubled for many years, became strangulated. I was taken back to my hotel and Dr. Carnochan, my friend's family physician, was summoned, and everything was attempted to reduce it, but to no purpose. Next day Prof. Hamilton was called in consultation. Both physicians tried their best, but without success. Having had some experience myself in strangulated hernias and being in the hands of two eminent physicians, Dr. Carnochan having been a pupil of Sir Ashley Cooper, who was an expert in hernial operations, I concluded that the sooner the operation of releasing the hernia was performed the better the result would be. So I informed the doctors that I was ready and the operation was performed. It was a femoral hernia, and a portion of omentum protruded and was adherent in the canal, which during the operation was ligated and subsequently served an excellent purpose as a prop, becoming the means of a radical cure. I was under the influence of chloroform two hours, but never felt the least pain.

Dr. George Burwell made use of chloroform in every case of obstetrics he attended, for many years, but in later years he abandoned its general use. According to my experience it predisposes to postpartum hemorrhage, on account of its relaxing property. Chloro-

form was used almost exclusively as an anesthetic in this city up to recent times, and, as far as I know, with general satisfaction. Dr. Winne had me, for many years, administer chloroform in almost every operation he performed.

Dr. Morton, of Boston, administered ether in the Massachusetts General Hospital, October 16, 1846, on the occasion of a surgical operation performed by Dr. J. C. Warren. He had, before, made several successful experiments in the extraction of teeth. He procured a patent under the name of Lithean, but he had a hard road to travel. About the time his claim underwent an elaborate investigation in congress, he visited this city for the purpose of interesting the profession in his case. The honor of the discovery was awarded to him by a select committee of congress, but he never realised any pecuniary comfort from the government.

Of late years, ether has, to a great extent, superseded chloroform, because of the number of fatal cases which was attributed to the latter. I regret this change and believe that, in some such fatal cases, carelessness was the cause, or that such subjects had heart trouble. I have administered chloroform very many times and never witnessed any serious results. It is said that the medical records of the Crimean war do not furnish one fatal case attributable to chloroform.

I am inclined to believe that with proper care and more gradual administration, with plenty of air and a due regard to the conditions of the heart, but very few cases would result in death. It ought also to be remembered that ether requires a much longer time to produce narcosis. Many subjects do not take as kindly to it as they do to chloroform. The fighting and apparent suffering of many, in the first stage of its administration, makes an observer inclined to the belief that the patient is not much benefited by the anesthetic, ether.

Anesthesia was waiting for the arrival of a partner for a long time; at last it came, and is now known by the name of antisepsis. Lister, another Scotchman, introduced the agent to the profession. Both anesthesia and antisepsis are so closely related that the one cannot be mentioned by the surgeon without speaking of the other. Together they have revolutionised the practice of surgery. No such important and daring operations as are now daily performed were undertaken before the two agents mentioned were at the command of the surgeon. Operations that were

formerly considered very dangerous and hazardous, terminating frequently in death, are now made with excellent results.

Tait, the successful gynecologist of England, is said to be an exception in not using antiseptics. If this be so, the rule is confirmed, since there is no rule without an exception.

There is yet another contributor to the advancement of medicine, whose name I mentioned in the beginning of this paper, but of whom I will say but a few words. Bacteriology is beginning to loom up on this side of the Atlantic. It was but an infant a few years ago, but already is accorded an important place in the science of medicine. Malignant anthrax, hydrophobia, diphtheria and, possibly, tetanus, that were considered monsters of diseases, have become manageable as a consequence of the lessons taught by bacteriology. Its value as a combatant of disease is established and it challenges the imagination to contemplate its future.

As regards the other part of my charge, on which it is expected I should say something—namely, of personal reminiscences of noted men of the profession in Buffalo, at an early period, it cannot be expected, in consequence of the limited time allotted to me for the different subjects, that I can say much about the noted men of fifty or more years ago. My remarks, therefore, will be brief.

Fifty-two years ago, from which time my remarks commence, Dr. Josiah Trowbridge was the oldest of the noted men of the profession then practising. He was an able physician, who kept well abreast of the advancement of the medical science by strict application to its study. He was once mayor of the city.

Dr. Flint was at the head of the doctors then in Buffalo. He gave public lectures, repeatedly, on the subject of anatomy, illustrating the different parts and organs on a manikin. As a consultant he was a model. He left this city for New York about the same time that Prof. Hamilton did. Both became professors in the Bellevue Medical College and both, as you all know, became distinguished and famous in their particular branches of the art of medicine.

Dr. James P. White acted a prominent part among the professional men as a manager and leader. He excelled in administrative qualities; he was a manager, as I will illustrate. In a meeting of this society, January, 1881, Dr. White came to me and said, "You ought to be our next president." I had never thought, nor had I any aspiration after the office, but the little vanity that possessed

me made me reply that if he thought I was the proper person, I would accept the office if elected. In less than fifteen minutes after, he had manipulated the members and I was afterward elected president. When I attended my last course of lectures in the Geneva Medical College, Dr. White came there to carry out his scheme of having the college removed to this city, or, at least, the prominent members of its faculty, such as Professors Hamilton, Webster and Hadley. He succeeded as regards the professors. But as almost all of you knew him personally, with, perhaps, few exceptions, and remember him, it is not necessary for me to say anything further about his superior attainments and distinguished characteristics.

Dr. Charles Winne was considered one of our best surgeons, if not the best, before Professor Hamilton came to this city and again after the latter left for the city of New York to assume the professorship of surgery in the Bellevue Hospital Medical College. Dr. Winne had a large general practice and devoted every leisure moment to the study of subjects of medicine.

I must not forget my preceptor, Dr. F. L. Harris, who, with a collegiate education, was well informed on the subjects of his profession, and would, therefore, have had a brilliant future here, but left this city for New York, where he practised for many years, until he died.

Dr. Sprague, a prominent practitioner, with a very large general practice, was also popular as a surgeon. Dr. Loomis was in partnership with Dr. Sprague, and performed some nice surgical operations and had a large practice.

Dr. Pratt was somewhat brusque in manners and speech, but of a kindly disposition; his practice was among older families. After practising for years he went to Paris to study up some particular branch of medicine that he was interested in.

Dr. Barnes was a fine gentleman and possessed a collegiate education. He pursued his considerable practice unostentatiously afoot until in his later years he got himself a horse and chaise, but in consequence of an accident whilst driving he gave up his vehicle and ever afterward returned to pedestrianism.

Dr. Bryant Burwell, the father of George, had a considerable practice, and was also noted among his colleagues.

Dr. W. K. Scott, who spoke German, was president of this society in 1844. His practice was limited, devoting some time to municipal affairs as city surveyor and engineer.

There may have been a few others, then practising medicine, and belonging to the regular profession, who might deserve mention, but my acquaintance with them and recollection go no further than the above referred to.

Some differences of opinion and views of purposes manifested themselves about the time the Buffalo Medical College was to be inaugurated. Two factions came on the field, led, the one by Dr. White, the other by Dr. Winne. But it is not in good taste to perpetuate the memory of the apple of discord by relating the particulars of the strife—it is enough for my purpose to indicate vaguely the cause in the few words of Shakespeare: "To be, or not to be."

About twenty years ago, Professor Hamilton and myself, both involved in the above questions of unpleasantness, but on opposite sides, met on an occasion, and there and then canceled our differences, embraced each other and parted as friends.

In conclusion, I heartily wish you all a happy and ripe old age, and if the progress of our art keeps apace in the future with the past seventy-five years, some of you will witness such brilliant achievements as are now beyond our comprehension.

309 Elmwood Avenue.

CHLOROFORM—ITS METHOD OF ADMINISTRATION, ITS DANGERS AND THEIR TREATMENT.

By JOHN PARMENTER, M. D., Buffalo, N. Y.,
Professor of anatomy and adjunct professor of surgery in the Medical Department, University of Buffalo.

THE writer begs that the members of the Academy will pardon him for having chosen so hackneyed a theme for this evening's discussion. It is his experience, however, that chloroform is very commonly improperly administered, that its signs of danger are often misunderstood or ignored, and that when death is threatening, only too often the best means of averting it are either omitted or ineffectually employed. It would seem, therefore, not inappropriate to regard this subject as sufficiently practical and important to claim our attention even though we of necessity go over old ground. It is along the lines mentioned that the subject will be presented for your kindly consideration. I wish, further, to say that I shall not enter upon a discussion of the question,

1. Read at the Buffalo Academy of Medicine before the Section on Surgery.

chloroform *vs.* ether, for I think we are all pretty well agreed that chloroform has something of the same relation to ether that morphia has to opium. It is more powerful, it is given in smaller doses, and yet has advantages which make it too valuable to be discarded. It is our duty, then, to learn how to use it properly, thus minimising its dangers and more effectually combatting them should they arise.

Physical Properties.—Pure chloroform is a clear, colorless, very volatile liquid. It has a pleasant aromatic odor, which disappears entirely upon complete evaporation. It has a sweetish taste.

Quality.—How often do we give a thought as to the purity of the chloroform we use? Yet this is a most important consideration. Among the many impurities found in chloroform the most common are adulterations with spirits of wine, ether, and the like, the very dangerous compounds of methyl formed during its manufacture, and in the decomposition products which develop when the drug is long exposed to air and light. These are free chlorine, compounds of the hydrocarbons with chlorine, aldehyde, hydrochloric acid, acetic acid and formic acid. How, then, may we know the impure from the pure drug? The simplest and most practical test is Hepp's smelling test. This is made by dipping chemically pure filter paper (the so-called Swedish filter paper,) into the chloroform and allowing the latter to evaporate. Pure chloroform leaves no odor. If the chloroform is impure, a more or less sharp, irritating and unpleasant smell remains. I have seen most persistent and dangerous vomiting, headache and stupor, lasting several hours, occur from the use of chloroform afterward found to contain a large quantity of methyl compounds. The conclusions to be drawn from such experience are, that only chemically pure chloroform should ever be used and that pure chloroform should be bought in quantities proportionate to the demand of the physician for it and kept in dark-colored, well-stoppered bottles. The addition of ½ to 1 per cent. of absolute alcohol prevents decomposition and in no way diminishes the value of the chloroform as an anesthetic.

Administration of Chloroform.—Under this heading we may properly consider, first, the qualifications of the anesthetiser; second, the apparatus to be employed; third, the preliminary preparations for the patient; and fourth, the technique of administration.

Qualifications of the Anesthetiser.—The custom of relegating the administration of chloroform to a student or to the least expe-

rienced physician, to nurses and even to the laity, is to be deprecated. So strong are my convictions upon this point, that I am perfectly sincere in saying that were I to require an operation involving the administration of chloroform, I should feel much more solicitous concerning the ability of the anesthetiser than of the surgeon, unless the operation were one requiring exceptional experience and skill. The anesthetiser should be experienced, cool and so fully appreciative of the great responsibility of his position as to give his entire care and attention to his patient. It is a common thing to see the anesthetiser's eyes fixed upon the operation instead of the patient. I have had several most unpleasant experiences, fortunately none of them fatal, from carelessness and inattention to his own work on the part of the anesthetiser.

The Apparatus.—This should include a mask (Schimmelbusch's is the one I prefer), chloroform dropper, a mouth-gag, strong tenaculum and sponges upon holders. A hypodermic syringe with digitalis and strychnia should be at hand and ready for instant use. The advantage of the mask is its simplicity and comparative cheapness. A still cheaper and practical substitute can be made from telegraph wire. The gauze covering the frame should, after each operation, either be boiled or thrown away. There is no question but that diphtheria, scarlatina, erysipelas and other contagious diseases have been communicated to healthy persons by means of infected masks, and no person should be exposed to this risk when the prevention is so easy. I have purposely substituted the strong tenaculum for the regular tongue forceps, for the reason that the latter is not an effectual instrument. Furthermore, it inflicts considerable injury to the tongue, which not only causes much discomfort to the patient in the days succeeding operation, but it may in children seriously interfere with their alimentation. The strong tenaculum, fastened into the back part of the tongue, is a less harmful and much more efficient instrument.

Preliminary Preparations for the Patient.—The physical condition of every patient about to take chloroform should be as accurately estimated as possible. Especially should the lungs, heart and kidneys be carefully and systematically examined. It is only by so doing that we recognise sources of possible danger. Where time permits, these examinations should be made sometime previous to the administration of the chloroform. It is cruel to begin the examination of the heart just before the patient begins to inhale the anesthetic. His mind, already much disturbed, is

further distressed by visions of possible heart failure, and this new mental agitation is added to that already existing, and this condition adds something to the danger without a doubt. The ordinary diseases affecting the organs above alluded to do not contraindicate the use of chloroform (fatty degeneration possibly excepted), but existing diseases should make us doubly watchful, as they unquestionably add to the risk. Strong, healthy adults should take no food for four or five hours previous to operation. In those less vigorous I have for some years allowed a small cup of tea, containing a little brandy, half an hour before the chloroform was given. This rarely induces vomiting and is of distinct value as a stimulant to the circulation. The clothing should be light, but warm and thoroughly loose about the neck, thorax and abdomen. Constriction at these places easily leads to embarrassment of the circulation. The mouth and pharynx should be inspected for foreign materials, such as gum, chewing tobacco, and the like; false teeth and plates are, of course, to be removed. The patient should lie on the back with the head on a level with the remainder of the body at the commencement of anesthesia; and should the operation necessitate the turning of the patient upon the side or abdomen, this may be done after full anesthesia. The lips and nose should be covered with vaseline or some unguent, especially in the case of children. A third person should always be present for obvious reasons. The patient, especially if young or nervous, should not see the instruments and other paraphernalia connected with the operation.

The Technique of Administration.—Having covered the mask with some porous material to insure the admixture of plenty of air, we may begin by dropping a few drops upon the mask and holding the same a little distance from the nose and mouth. Beside the discomfort to the patient of beginning with too concentrated vapor, there is positive danger of producing arrest of breathing by the irritation of the terminal fibers of the fifth nerve in the nasal mucous membrane and of the superior laryngeal in the larynx. At most, not more than twenty drops should be put on the mask at one time. These may be lessened as anesthesia proceeds and should not be reapplied until the dark stain, caused by the preceding drops, has passed away. In a short time it will be found that two or three drops at a time suffice to maintain complete surgical anesthesia. Giving chloroform in this way has several advantages:

1. It does not frighten the patient or make him uncomfortable.

2. The excitement stage is almost always absent.

3. After-effects, like nausea and vomiting, are either absent or less severe.

4. The narcosis can be maintained for hours without danger.

5. The amount of chloroform used is less than one-half that in the ordinary way.

6. The danger from an overdose is almost *nil.*

7. The method requires the undivided attention of the anesthetiser, who is thus prevented from watching the operation to the neglect of his patient. The common practice of pouring a quantity of chloroform upon the mask to make it "last," that the anesthetiser may observe the operation with less interruption, is criminal.

The patient should close the eyes and either take full, deep and regular inspirations or, if too nervous to do this, an excellent substitute is to count, a procedure which insures regular breathing. Quietude about the patient, kind encouragement, removing the mask from time to time to give more air, telling the patient some of the sensations he may expect, such as slight choking, and hammering noises in his ears, and that when he begins to swim off into space he must not resist, will make most persons much more tractable. They feel assured that what they are experiencing is the expected and not of bad omen. The explanations and assurances are not trivial, for they aid in obtaining tranquility, which in turn lessens the liability to respiratory and circulatory disturbances. In about five minutes, some sooner and some later, the average person will have become insensible. This period not infrequently, however, varies and no one can ever predict with certainty as to the time that will be required in a given case to produce anesthesia. I recently operated upon a case in which an experienced practitioner had produced not even unconsciousness to the voice in one hour. Squibb's chloroform had been used, and after a time all air was excluded, so far as towels over the mask could shut it out. Investigation showed that the mask had been kept too wet. A dry mask and the drop method of administration produced anesthesia in five minutes.

Signs of Complete Anesthesia.—An operation or examination that is attended with great pain should never be begun until complete anesthesia has been obtained. How may we know when we have obtained it? A common practice is

(*a*) *The Cornea.*—To touch the cornea, which ordinarily becomes insensitive at this time. Not infrequently, however, this insensi-

bility long precedes full anesthesia and thus may easily mislead. I have experienced this many times. Too frequent touching obtunds corneal sensitiveness and may also lead us into error. Pricking the inner surface of the thigh is a very good test, as Chassaignac long ago pointed out.

(*b*) *The Pupils.*—The action of the pupils is to be observed, notwithstanding that it is not the same in all persons. The sphincter pupillæ or iridis is governed by the oculo-motor nerve, the dilator by the sympathetic. Usually the pupils behave as follows: at first they dilate; as the narcosis deepens they become contracted and remain so during full anesthesia. As feeling returns they begin to dilate again. However, if in full anesthesia, the pupils suddenly and widely dilate, it is a sign of collapse and calls for the immediate withdrawal of the chloroform. While in many cases we may get reliable information from the condition of the pupils, they are by no means to be implicitly depended upon. For instance, while ordinarily the pupils are contracted in full anesthesia, it not infrequently happens that they remain widely dilated from the beginning to the end of the operation. In fact, one must watch the patient for some time after narcosis has been established and observe the effect of larger and smaller doses of chloroform before correct inferences can be drawn.

(*c*) *The Respiration.*—By far the most important and reliable indicator of normal anesthesia is the respiration. This should be seen or heard throughout the operation and should be of a soft, regular, snoring kind. In the vast majority of cases it is the first function to give the signal of danger, the adherents of ether to the contrary notwithstanding. As a source of information the pulse is not to be compared with it, for the pulse may vary greatly from innocent causes and give the anesthetiser and operator much needless alarm. During a difficult operation not long ago, in which a careful dissection was necessary and which did not permit undue haste, my anesthetiser gave me the cheering information that the patient had no radial pulse. A glance at the lips showed them to be of good color and further investigation revealed the absence of pulse to be due to a strained position of the arms above the head. Again, the pulse always becomes markedly weakened just before emesis and thus may needlessly alarm us.

(*d*) *The Color of the Face.*—The color is usually a reliable index of the patient's general condition. The appearance of cyanosis or of pallor demands immediate attention. Cyanosis means

embarrassed respiration. Pallor indicates circulation depressed from surgical shock, insufficient breathing (asphyxial syncope) or an overdose of chloroform. It may also, and often does, precede vomiting, but when so caused need not occasion alarm.

The operation ended, the patient should not be quickly or rudely awakened from his sleep. It is oftentimes hard to prevent relatives and over-anxious friends from trying to elicit signs of consciousness. It is much better, however, to let the patient awaken naturally, as they have less nausea and vomiting and feel better generally when left alone. This is especially true of children. The anesthetiser should remain by his patient until consciousness has returned. By so doing such accidents as choking from vomit, hemorrhage, and the like, will not be serious if they occur at all. The room should be kept dark and quiet, but well ventilated. The patient should be given food as soon as the appetite returns.

For nausea and vomiting, hot water, with or without sodium bicarbonate, in half teaspoonful doses, iced champagne or cerium oxalate, may be used. A hot application to the epigastrium is often also very serviceable.

Before discussing the accidents and dangers which may occur during chloroform narcosis, it is fitting to consider how chloroform kills. There is a common impression among the profession that it invariably exercises its lethal effect upon the heart. That it sometimes does so there can be no doubt, but that this is its usual action is certainly not so. Its primary effect, in the vast majority of cases, is upon the respiration, popular belief notwithstanding. The reason for the impression regarding the action of chloroform on the heart is probably to be found in the varying opinions of experimenters, therapeutists and surgeons, which one finds at every turn. However, a careful investigation of statistics will conclusively show that after its effect, primarily upon the vasomotor system, the chief action of chloroform is upon the respiratory centers in the medulla. This is the experience, in the main, of both experimenters and practical surgeons. However, as before said, chloroform may kill by acting directly upon the heart muscle. The sphygmograph usually shows true depression of the heart, and the pulse almost invariably becomes more feeble under its use, owing no doubt to cardiac dilatation. It also causes marked vasomotor dilatation, which condition greatly influences respiration and the action of the heart. The common phenomenon of gasping respiration in ordinary faintness is probably due to sudden vascular dilatation, rather

than to any direct failure of the heart. So, also, the exceedingly rapid pulse of shock occurs with the relaxed blood-vessels found in this condition. From what has been said we may easily appreciate that those diseases which affect the respiratory or circulatory systems add an element of danger when patients so afflicted require chloroform anesthesia. As Hare tersely and clearly puts it:

> Supposing that the amount of depression from very full doses of chloroform equals twenty-five units, this amounts to little in the normal heart; but if the heart be depressed twenty-five additional units by disease, the depression of fifty units may be fatal, particularly if to this fifty is added twenty-five units more of depression through fright and cardiac engorgement, through disordered respiration or struggling.

Among these diseases may be mentioned fatty degeneration of the heart, valvular diseases, atheromatous degeneration of the walls of the vessels and particularly of the coronary arteries, anemia, chronic pulmonary disease, Bright's disease and chronic alcoholism. Fatty degeneration of the heart muscle is especially dangerous, but whenever any of the above-named diseases exist, singly or in combination, chloroform must be given with the greatest caution, and especially so whenever respiratory or circulatory disturbances have been brought about by these diseases. The subject of the influence of pathological conditions over death from chloroform is a most interesting and important one, but time does not permit any further discussion of it on this occasion.

Anxiety and fright, while not in a sense pathological conditions, certainly are depressants of the heart and may, in one way or another, produce dangerous or fatal symptoms, as has been shown in cases where death has occurred before any chloroform has been administered. For instance, Desault was about to perform a lithotomy, and to demonstrate the line of incision he drew his finger nail over the patient's perineum. The latter gave a loud cry and instantly died. Cazenave, who was about to operate upon a very nervous patient, did not give chloroform, but made a pretense by putting a cloth over the patient's nose. The respiration and heart stopped, and the patient was dead. Simpson's first patient died in a similar way. The chloroform bottle was accidentally broken and the chloroform spilled. The operation, a herniotomy, was begun without the anesthetic. On incising the skin the patient died. It is easy to see how, oftentimes, chloroform may get credit for causing death which it does not deserve.

Impure chloroform has already been alluded to as dangerous. Here again we must be cautious in ascertaining the true cause of a fatal effect. Just how often impure chloroform leads to disaster it is impossible to say, but it seems not unlikely that it is more frequent than is commonly supposed.

Let us now consider some of the accidents and dangers which may appear during chloroform narcosis.

1. *Respiratory Embarrassment or Failure.*—This may be due to (*a*) mechanical obstruction, (*b*) paralysis of respiration and (*c*) spasm of the respiratory muscles.

(*a*) Mechanical obstruction may be due to various causes. The lips of edentulous subjects may become approximated and prevent inspiration. Lenhart reports a case of asphyxia in a girl with a very pointed nose and exceedingly thin alæ nasi, which through atmospheric pressure were brought tightly against the septum, thus closing the anterior nares. The tongue may become engorged, it may be drawn back by muscular spasm, or fall against the pharyngeal wall from paralysis. Intranasal conditions, diminishing the caliber of the nares, partially completed deglutition, laryngeal spasm or foreign bodies in the same, such as blood, vomit, mucus, and the like, are among the sources of obstruction.

(*b*) Paralysis of respiration is usually caused by an overdose of chloroform, and when so caused is accompanied with symptoms of collapse—namely, pallor, a very feeble pulse, and the like. It may, however, depend upon syncope or pulmonary disease.

(*c*) Spasm of the respiratory muscles is not uncommon. It is usually not severe, but may cause death. It occurs just before anesthesia has become complete, and its chief feature in the beginning is the extreme rigidity of the chest which, in adults, it may be impossible to overcome.

2. *Circulatory Disturbances or Failure.*—As has been previously said, these disturbances are almost invariably connected with, or dependent upon, respiratory embarrassment or failure. This is most important to remember and will be alluded to again when considering the treatment to be pursued in cases of accident. The circulation may be depressed by (*a*) surgical shock, (*b*) syncope following embarrassed or arrested respiration (asphyxial syncope), (*c*) an overdose of chloroform and (*d*) nausea with or without vomiting.

(*a*) Surgical shock varies according to the nature and severity of the operation and the resistance of the patient. It is usually

gradual in its appearance, but when great irritation of the vagus or solar plexus has been caused during operation, it may appear most suddenly and cannot then be differentiated from syncope due to too much chloroform. The symptoms are classic and need not be enumerated.

(*b*) Syncope following embarrassed or arrested respiration. The first symptom of this condition is cyanosis, which gradually or rapidly gives place to pallor and cardiac failure. It may occur alike in the feeble or the vigorous. In the latter the asphyxia begins when the patient resists the chloroform. The way in which it occurs is as follows: the patient struggles, then holds his breath; the lungs contain chloroform, which the blood is absorbing while the patient is not breathing; the right side of the heart becomes fuller, all the cardiac cavities become distended, the blood pressure falls and finally cardiac action ceases.

(*c*) An overdose of chloroform causes fatal depression of the circulation and of the heart. The face becomes ashy, the eyes staring and expressionless, and finally the respiration ceases almost coincidently with the circulation.

(*d*) Nausea, with or without vomiting, sometimes causes death from too great a fall in the blood pressure in feeble or diseased patients. In these cases the suspension of breathing incident to vomiting may suffice to induce asphyxia followed by syncope, ending in death.

Inasmuch as any or many of these conditions may arise at any stage of chloroform narcosis, what can we do to remove them speedily and safely? We may divide our therapeutic measures into (*a*) preventive and (*b*) immediate.

(*a*) *Preventive Measures.*—Primary syncope is usually due to the irritating effect of the chloroform vapor, upon the terminal branches of the fifth nerve in the nasal mucous membrane and of the superior laryngeal in the upper part of the larynx. These run to the central nervous system, and reflexes originating there manifest themselves along the motor tracts leading to the muscles governing respiration and through the vagus, which governs the heart. There are various ways of rendering these reflexes more or less harmless.

Rosenberg, in the last congress of surgeons in Germany, drew attention to the fact that by cocainising the nasal mucous membrane and that of the pharynx and larynx before administering chloroform, we might abolish the reflexes called forth by the irri-

tation. He found by experiment that at the beginning of anesthesia, (the blood pressure equaling 100,) the systole represents 210 and the diastole 40. Under normal conditions, the blood pressure being the same, the systole equals 110 and the diastole 90. The difference is due to the irritation of the terminal fibers of the fifth nerve in the nasal mucous membranes, which in turn produced respiratory disturbances. To cocainise the nares with a 2 per cent. solution, either with a camel's hair brush or a spray, is good practice, especially in the case of patients whose condition, for one reason or another, requires that the extra precautions be taken. Patients thus treated struggle less and come under the anesthetic more quickly. If no cocaine is at hand, we may force the patient to breathe through the mouth by holding the nose, as practised by Guerin. It may be well, just at this point, to repeat the admonition never to exhibit chloroform vapor in too concentrated form. The procedure is extremely dangerous and, therefore, always to be avoided.

(*b*) The use of atropine previous to anesthesia in part removes the danger arising from excessive irritation of the vagus. Hare believes

> That atropine enables more chloroform to be given without circulatory depression than can be used if no atropine be administered, and that there is good reason to believe that the use of atropine by surgeons, for the purpose of stimulating the respiratory functions or preventing cardiac inhibition by irritation of the vagus, in reality prevents dangerous symptoms chiefly by its vasomotor influence.

(*c*) Morphine in one-eighth to one-fourth grain doses, given fifteen minutes before the beginning of anesthesia, renders the brain much less impressionable, and, therefore, insures more tranquillity on the part of the patient. I am quite sure, however, that in some cases morphia favors respiratory syncope, and, therefore, it should be given in selected cases only and not as a routine practice, as is so commonly done in hospitals by many surgeons. When properly used it is of distinct value not only in rendering the patient more calm, but also in curtailing the time and amount of chloroform required. It is usually given in combination with atropine and in this way the combined effects of both drugs may be secured.

(*d*) Digitalis should be used in certain cases before anesthesia, according to H. C. Wood. He finds that digitalis markedly increases arterial pressure and has seen death apparently averted

by its use. In one or two experiments, in which large amounts had been used, he saw sudden systolic cardiac arrest, showing that digitalis in sufficient dose could overcome the effects of chloroform. He says that "in all cases of weak heart in man a full dose of digitalis, given hypodermatically before the administration of chloroform, would greatly lessen the danger of cardiac collapse."

So much for the preliminary or preventive treatment of chloroform accidents. Given a case, however, in which the treatment has been inoperative in preventing trouble and we are brought face to face with impending death, what shall we do?

(*b*) *Immediate Treatment.*—Shall we stop to debate whether we have to deal with respiratory or circulatory failure, and as to what means we should employ in each kind of case? If we do, we shall often, perhaps always, allow our patient to die. One thing we do know from experience, and that is that artificial respiration exercises a great influence upon the circulation as well as the respiration. During inspiration a strong suction action is effected upon the thin-walled great veins, the right auricle becomes filled, and the pressure exercised by expiration aids in the emptying of the blood through the auriculo-ventricular opening into the right ventricle. On the other hand, a measure which will cause the paralysed heart to contract will have no effect upon arrested respiration, unless the blood being oxygenated in the lungs produces irritation, and hence we have in artificial respiration an agency which stimulates both respiration and circulation. In fact, experience is constantly proving that in this procedure we have a life-saving measure of the greatest importance and one which should be invariably employed. Bearing these considerations in mind, how shall we act in a case where death is threatening?

1. We must clear the upper air-passages of any foreign substances which may be producing mechanical obstruction. At the same time, we remove the pressure of paralysed parts upon the larynx by carrying out the following rule laid down by Hare:

> Place the index finger of each hand upon the corresponding cornua of the hyoid bone, whilst the middle fingers rest upon the angle of the jaw, and then press forward and upward, the same force serving to extend the head upon the neck; if this fails to open the glottis, by means of a tenaculum, thrust far back into the base of the tongue, draw it forward.

It will at once be seen how radically this procedure differs from Howard's, which is the one usually described and recom-

mended in text-books. There can be no doubt that Howard's method does not prevent but even favors the approximation of the tongue and soft palate, which thus cuts off the entrance of air through the mouth. Inasmuch as it is the tongue, and not the epiglottis, which usually causes obstruction, it is easy to understand that Howard's plan must often prove inefficacious. Mechanical obstruction, if existing, having been thus dealt with, we should immediately begin with artificial respiration.

2. *Artificial Respiration.*—The chest should first be compressed, to expel any chloroform vapor remaining in the lungs. The simplest and best method, in my judgment, of performing artificial respiration is Sylvester's, which has for its object the use of the arms as levers, acting so as to expand the chest-walls by means of the muscles placed between the limbs and the trunk, the origins of the muscles acting now as insertions and *vice versa.* This should be maintained for anywhere from one-half to one and one-half hours, or even longer when any hope is offered of ultimate success. I have seen more than one life saved, I am sure, by persistence and energy, and where a human life is at stake no effort is too great. If artificial respiration is ineffectual, as for instance in spasm of the respiratory muscles with rigid chest, direct inflation of the lungs with bellows may be employed with success. The Marshall Hall method of artificial respiration has many adherents. It is, however, not so efficient as the Sylvester method, which pumps into the lungs a much larger volume of air.

After employing artificial respiration for two or three minutes, in the manner just described, should it be attended with increasing signs of syncope, we must immediately resort to (*c*) Nelaton's inversion method, which consists in suspending the patient by the lower limbs, head downward, and continuing the respiration by placing one hand on the back and the other on the sternum. During the last winter I saved the life of a patient by this method. Just how it acts is uncertain, but there can be no question of its value. Under this treatment the pulse and respiration usually immediately improve. The restoration to a horizontal position should be very gradual, as not infrequently a sudden change from the vertical to the recumbent is attended with a renewal of the syncope.

(*d*) *Rhythmic Compression of the Heart.*—This is another procedure of unquestioned value, which has the great advantage that it can be used coincidently with artificial respiration. As

recommended and described by König, it consists of short, powerful impulses, with the fingers over the precordium, at the rate of about 120 per minute. In a case of König's, with each impulse a similar one could be felt in the radial pulse. The patient recovered. While the method of compressing the heart for this purpose is not new, the method of König is peculiar, in that the number of impulses given corresponds with the number of heart beats in the individual.

(*e*) *Electricity.*—What is the value of this agent in the class of cases under consideration and how may it be used? It may be applied to the phrenic nerve to stimulate inspiration, one electrode being placed over the nerve on the right side and the other over the sternum, or it may be used as a galvanic needle, which is thrust into the heart substance, or it may be employed to stimulate the nasal mucous membrane. When we remember that the phrenic nerve governs inspiration only and that expiration is just as essential in this class of cases, that a strong faradic current is a veritable poison to the heart, quickly causing paralysis in diastole, and that the use of the galvanic needle is too dangerous to be recommended, we must conclude that as an excitant of respiration electricity is inefficient and as a stimulant to the heart is dangerous. Fortunately a battery is rarely at hand and, therefore, only infrequently does harm.

(*f*) *Drugs.*—May we expect assistance from drugs; and if so, which shall we employ?

Alcohol is very commonly used in one form or another as a stimulant in cardiac depression. It is bad practice. In fact, it ought never to be used in chloroform syncope, for the reason that instead of antagonizing it only intensifies the effect of the anesthetic and lessens the dose necessary to produce death. In large doses it causes a fall in arterial pressure and a smaller pulse. Wood even goes so far as to say "that in not a few cases deaths which have been attributed to ether and other anesthetics have been in fact due to the alcohol which has been given the patient," and he further observes "that it should be an unalterable rule of practice that no alcohol should ever be given to the patient suffering from anesthetic cardiac failure." What applies to alcohol is applicable with equal force to most of the so-called cardiac stimulants.

In a general way we may say of them that they are not useful, often harmful, and time spent in using them can be employed to better advantage.

Digitalis has already been mentioned as a true antagonist of chloroform and should be used in cases requiring increase of cardiac force. It is best given hypodermatically in 5 to 10 drop doses.

Amyl nitrite is a drug much used in chloroform syncope. My own experience with the drug has been quite extensive. I have used it in solution (3 or 4 drops to the ounce of chloroform) and alone. The only death from chloroform I have ever had occurred with this mixture. In late years I have used only pure chloroform. The drug is dangerous, without doubt, if too much be given, and the ordinary dose is without effect usually. It does not seem to me a drug which deserves the reputation it enjoys.

Strychnia, in doses of 1-20 of a grain, raises arterial tension and deepens the respirations. It is, therefore, a drug which antagonises chloroform and can be safely and advantageously employed.

Cocaine.—This is also a powerful respiratory stimulant. Wood found that, in a chloralized dog, when the respirations had been raised as far as was safe with strychnia, cocaine was able still further to improve them, and he suggests that a combination of strychnia and cocaine would act more efficiently in the accidents of anesthesia than would either alkaloid by itself.

The injection of these stimulants directly into the heart muscle would seem to be justifiable. Dr. L. Pierce Clark (*Boston Medical and Surgical Journal*, April 18, 1895,) reports three cases of delirium tremens treated with strychnia injected into the heart substance. One case received 1-15 of a grain, followed in one hour with 1-20 grain, and recovered in five days. A second case required but one injection. I have had no personal experience with this method, but see no objection to it. How much the effect is due to mechanical irritation and how much to the action of the drug proper it is impossible to say, but probably both factors have their influence.

519 FRANKLIN STREET.

FRACTURES.—The object of the surgeon in treating fractures about the joints should be: (1) To allow free circulation in the limb; (2) to obtain complete rest for the injured structures until they assume their normal condition; (3) to posture so that the callus exudation shall not unduly hamper the joint movements.—*Medical Record.*

MEDICAL SURGERY.

By G. E. BENNINGHOFF, M. D., Bradford, Pa.

THE merging of medicine and surgery into one grand profession was done for a purpose. When it became known that certain drugs would produce the same results as blood-letting, it only seemed proper that he who could do one should be able to do the other, and time has proven the wisdom of such an idea and the association of the two. For all cases where similar results were desired could not safely be treated the one way alone, but it was necessary to decide which of the two ways was the best. The barber of those early days could bleed, but he knew nothing of producing similar results with drugs. The apothecary of that time knew how to do it by drugging his patient, but the sight of blood made him sick. Eventually it became necessary that one should be learned in both, and so came the physician.

As we come down the centuries many things have been changed from the original, either by adding to or taking from, until at the present time there is an effort to draw distinct lines between surgery and medicine, but the association of the two are just as necessary now as they were in times past. There is today as much of a medical side to surgical cases as there ever was, and the rapid progress of surgery, whereby medical cases of a few months ago are now surgical, affords abundance of proof that medical cases have a surgical side. An attempt will be made in this article to show why medicine and surgery should be associated more closely than ever. While so doing, cases demonstrating the above theory will be given, and at the same time an effort will be made to show that we need more physicians who can do blood-letting and drugging at the same time, or on the same patient, so to speak. The distance to step from one to the other is not very far, for the medical man must needs have all, or nearly all, the qualifications of the surgeon. At the present time he is supposed to be able to make a diagnosis of the disease present, to intelligently watch the progress of the case, so that when the danger signal is up he can call in the surgeon, have the surgeon operate, and finally attend the case through to either a successful or fatal termination.

On the other hand, one cannot be a successful surgeon unless he is, first of all, a thorough physician. There has always existed an impression, which undoubtedly originated not in the profession but with the people, that the surgeon must possess some peculiar

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make-up, a sort of mythical something, not possessed except by a very select few. One hears great stories regarding a certain surgeon; how he can cut people into pieces without an effort, until as a natural result the people call him a butcher. There is nothing in surgical experience that requires the coldness of mind and heart to the degree, as when one is compelled to sit by and see a patient die for the want of a little surgery. The man who can sit by and coldly wait for death and his fee has more nerve, as it is called, than has any surgeon.

The advocates of specialties claim for the specialist the superlative quality and skill acquired by his extensive experience in that one particular line. But on the other side it can be said, that while in the manual part of his specialty he becomes an expert, generally his powers of reasoning become narrowed until he obtains, so to speak, a special mental faculty, whereby all things partake alone of his particular specialty. It would seem that the broad experienced mind of the all-around general practitioner is better qualified to at least diagnosticate disease than the specialist, provided he has as thorough knowledge as he can have in the completeness of his profession; and further, there are none of the specialties so clearly allied to medicine, except those which are really medical branches, as is surgery, and instead of diverging, as is thought by some of the profession, they are coming more closely together.

This is being brought about because of certain diseases which are primarily medical but later are surgical, also certain surgical conditions which are later medical. Undoubtedly the diagnosis of surgical conditions requires as much skill as does any other part of surgery, yet the license given to the surgeon of the present day, whereby he is at liberty when in doubt to explore into any of the cavities of the body and thereby make his diagnosis certain, make it even more easy than in medical cases.

Fully three-fifths of my surgical work is sent to me by other physicians, and the accuracy of the diagnosis as made by the attending physician has thoroughly proven to me how capable the average physician is to diagnosticate surgical conditions, possibly not in all their detail and fulness, but sufficiently so to denominate the cases as surgical. From the foregoing I do not wish to be understood that all surgical diseases are easy of diagnosis, for many of them are not, but in comparison with medical cases I think they are the easiest.

In surgery the knife reveals many surprises. So does also the test-tube and the microscope in medical as well as surgical cases. One of the first surgical surprises that I found was so interesting to me that I think it will bear relating, as it serves as a good demonstration of the revelations of the knife. A woman had been calling to see me several times, during a period of six months, for a painful enlargement in the right crural canal. The enlargement was oblong, its base being upward and just beneath Poupart's ligament. At that point it was about three-fourths of an inch in diameter and could be reduced by lying down. During the time it was under my observation there was but little change, except in the increasing periods of pain. These were at times intense, but one time, instead of the patient coming to see me, I was sent for. The part had been painful for two days this time and had become very much swollen. There were nausea and vomiting present with extreme exhaustion and constipation. Having previously diagnosticated femoral hernia and at this time being unable to reduce it, I operated to relieve strangulation. After getting down to the sac and incising it I found, very much adhered to it, something which, after freeing it of all adhesions, did not look familiar to me. By continuing steady traction a portion of intestine came into view, which caused me to feel sure that I had the appendix vermiformis. I removed it and the patient recovered. Even after removal it was so enlarged and changed by inflammation and its results that I was uncertain as to what it was; but three years later the lady developed a subserous uterine fibroid, for which I did an abdominal section, and while doing it had a good opportunity to search for the site of the appendix, finding where it had been removed at the former operation.

It is not alone in anomalies that the surgeon meets with surprises, but they often come where the conditions are not abnormal. Only three weeks ago a lady presented herself with an abdominal tumor, which was freely movable and floated about in the abdominal cavity, reaching as high as three inches above the umbilicus. The growth was hard and combined palpation revealed its attachment to the uterus. I did not hesitate to diagnosticate a uterine subserous fibroid. When she was operated on, the tumor was found to be a dermoid cyst of the left ovary, so completely filled that there was no possibility of fluctuation. The tube had adhered to the uterus and formed a sort of secondary pedicle. The tube was much enlarged and contained a fetus one and one-half inches long.

I wish to relate a case in point, to show how easily the surgeon, who relies alone on his surgical experience, can be misled by physical symptoms. Four months ago I was called to see a woman with an abdominal tumor, which was fully six inches in diameter, freely movable, located in the left iliac and lumbar region, extending forward past the median line. One could say it was semi-hard and felt very much like an enlarged spleen, or some form of spleenic tumor, but the physicians attending the case informed me that they had found pus in the urine in large quantities. So they decided, and I agreed with them, that the tumor was an abscess of the kidney. The usual lumbar incision was made over the kidney, through which the abscess and diseased kidney were reached. The patient made a perfect recovery and, with one kidney, is perfectly well. There can be no doubt but that had one depended upon physical symptoms, the abdomen would have been opened and a very serious, if not dangerous, operation would have been undertaken, whereas the one which was done was very simple and comparatively without danger.

But the part of this subject which, from a practical standpoint, interests us most is surgical cases which are medical, either before the advent of the surgeon or after. It is interesting, just at present, to note what is being said regarding the vast number of persons having had, for various diseased conditions, abdominal sections performed that remain invalids. Indeed, it is this fact alone, one may say, that stands as a powerful argument in favor of Pean's method of complete removal of uterus and adnexa, where formerly only the diseased part was removed. The advocates of Pean's method claim that the ratio of complete cures after section is small because the uterus is allowed to remain, and subsequently continues to produce disease either through the nerves or lymphatics. If the surgeon who performed these operations had been a physician, so to speak, the results might have been vastly different.

A surgical operation is so very often done as a last resort, that the idea prevails that it is the last thing that needs to be done. I believe right here is one of the greatest mistakes in the profession. Surgery, at its best, is only the beginning of any required treatment for the cure of disease, and is only a small part of it. Why a patient, who has been suffering for from one to twenty years from some chronic surgical condition, should be considered cured when the surgeon has removed the sutures, is one of the most incompatible ideas which we are compelled to analyse. Take, for

instance, any form of periuterine inflammation, which results in pus formation or extensive adhesions, from which a woman has been suffering for years. Is it not the invariable rule that the nervous system is a wreck? Spinal irritation, with all the host of symptoms that go with that condition, indigestion of all forms, cardiac irritations; in short, there are so many sympathetic disturbances, that the patient hardly thinks of the original symptoms until reminded of them by her physician. The part originally diseased is removed, but all the other semi-diseased nerves and organs are allowed to remain and get well of themselves. Is it strange that often they do not get well?

In my surgical work I have never ceased to remember that I am a physician and I have always thought it proper to treat patients medically before and after operation. Sometimes, if well treated before intended operations, the surgeon's occupation will be gone, because the case will have gotten well. Generally, when the physician attending a surgical case becomes convinced that an operation is necessary, he sends his patient to the surgeon who performs the operation. If the patient recovers from it she is so thankful for her life, that she sings praises of the surgeon. Not that she is cured, but because she did not die in the great ordeal through which she passed. When, after a few months, many of the old symptoms remain, she either goes to see the surgeon, or she goes direct to her own physician. The latter is disgusted when she relates the same old symptoms and quickly prescribes for her and prescribes her out of his office. Thus she passes on, from year to year, uncured, and she is numbered with those who receive no benefit from a surgical operation which was really necessary. Had her physician and surgeon been one and the same, the treatment would have been continued until she was cured. And what holds good in this hypothetical case, is true in very nearly all operative surgical cases.

Consider the legion of tubercular diseases which come under the surgeon's hand, and all allied affections. Do they not require the intelligent treatment of the physician in order to be cured? Think, too, of the rachitic! in these what can surgery do without medicine? Several times rachitic cases have come under my care that have undergone surgical operations for deformities. All treatment ceased at the advent of the surgeon and was not begun again. The result was that the deformity returned worse than ever. In reference to the importance of medical treatment with

surgical operations, I wish to offer the results as to cure in 120 abdominal sections, performed prior to 1895. Those made since the beginning of this year are not included, because the time since doing the work is too short to determine whether they are or are not cured. These 120 were done from 1889 to 1895 and for all conditions. There were 13 deaths, leaving 107 cases which recovered from the operation, all of which required medical treatment either before or after the operation. In this list, if two are excluded who have ventral hernias, but are otherwise well, there are only two who are not cured, but even they are greatly benefited and both of these had ureter disease prior to operation. Thus of these 107 cases, 105 were cured, and compared with what is claimed as a result in these operations I am led to believe that medical treatment cured many of them, which without it would have been surgical failures, and it is these and similar results in other surgical conditions which force me to believe that the physician and surgeon should be one.

Is it going too far for us to say that a patient to receive the proper care prior to, and after a surgical operation, should be operated upon by the physician? It will not be a great while until the thorough instructions that the medical student is now obliged to receive will be such to thoroughly equip him to do his own surgery, quite as well as to treat disease medically. Even now our great medical colleges show the student more surgery than medicine. Why, then, should he not do both? That the time is not far distant when he will, is demonstrated very plainly and when he does many lives will be saved by his promptness to operate at the golden moment, instead of waiting for the surgeon.

VAGINAL CELIOTOMY.[1]

By WILLIAM B. JONES, M. D., Rochester, N. Y.

IN VAGINAL celiotomy we in great measure avoid sepsis, shock and hemorrhage. As to sepsis, let me remind you that a part of the peritoneum becoming infected does not cause general septic peritonitis if the discharges from it are not forced over the rest, as seen in operation by two stages of colotomy or for artificial anus; or better, in appendicitis if abscess bursts after adhesions are formed, or still more nearly like the conditions in this opera-

1. Read at the twenty-eighth annual meeting of the Medical Association of Central New York, at Syracuse, October 15, 1895.

tion, if it bursts without such adhesions; after that general peritonitis will be prevented, always, I believe, by leaving open a free incision and draining continually with gauze. Notice that such drainage lacks several advantages of the vaginal form.

In the latter, the abdomen is opened in its most dependent part, the intestines frequently are not seen, they are never disturbed and if any become infected they are not pushed away among other coils. Below them there is the hollow of the sacrum and coccyx, an ideal trap where all oozing collects and is emptied by the vaginal tent on to the external dressing, being disinfected as it goes. The amount of oozing is a revelation to everyone. To see it, is to marvel at the amount the peritoneum has to absorb when it is not drained. It is the perfection of culture media for septic germs, and where it lingers is a forcing bed for their development. The advantage of removing it is obvious.

Now let us consider the course of an infection of a vaginal celiotomy wound; inflammation begins, exudation of serum and lymph occurs, serum drains into Douglas's pouch, whence it is immediately disinfected and removed, the lymph forms adhesions everywhere, roofing over the septic area and building a barrier that stops the process. It is interesting to watch the temperature during this time. On the second day, in severe cases, it rises rapidly during the few hours required for checking the progress of inflammation, then it rapidly falls to nearly normal and remains there. Easy cases without that inflammation do not have that rise.

This is not the place to discuss indications for hysterectomy, but all will advise that all tissue irreparably diseased should be removed, uterine or other, and what is removed in no way affects the principle of operation. A hysterectomy makes it easier.

Freedom from shock is due to the fact that you do not drag out the intestines and expose them to air and changes of temperature, you do not make a roadway through them to be traversed many times by hands and instruments with whatever they have to carry, you do not handle the intestines at all in most cases, scarcely at all in any, and then through some distance of canal that allows no change of temperature. The patient's abdomen is kept warm and covered instead of being exposed, wet and cold.

The uterine and ovarian arteries should be found and tied as early as practicable in cases of large solid tumor and on the affected side in ectopic gestation. Otherwise no ligatures are necessary, except on the pedicle. Before they can be reached, strong traction

on the tumor is effective in preventing bleeding, by compression. After operation, hemorrhage cannot occur without the nurse knowing it from the start, and this is a strong point in the operation.

Every drop of blood and other discharge, too, starts for the outer world directly it escapes from the vessels or tissues and the dressings surely indicate what is going on. Furthermore, in case of primary hemorrhage that had been overlooked, or of secondary hemorrhage, there is no new operation to perform. Clean your hands and pass a clamp to the bleeding point, close it and the bleeding stops. The clamp stays forty-eight hours and the patient recovers. Hemorrhage, after a closed wound, is not discovered until the patient is *in extremis*; to stop it requires another operation, especially formidable at that time, and it is true that few recover.

I have shown that patients should not die from sepsis, shock or hemorrhage. If they do not die from these, they do not die, and so sure of this am I that, when it is my own patient, I frequently say to her or her friends beforehand that if it is not a septic case to begin with and she should die it would require an explanation. It could not be from an operation itself, properly performed. I allow a little leeway in pus cases, because I am not sure that in certain cachectic and diathetic conditions we can invariably prevent absorption through lymphatics, even in a wide-open wound. I think it may possibly occur, but do not know that it can.

I would not commit myself to that statement in all large tumors either, because in extremely difficult ones shock or hemorrhage might be possible, although, if they are operable from below, never so probable as by laparatomy from above. These two exceptions are the only ones.

Intestinal obstruction is caused by adhesions. Old ones may be broken up and new ones formed in new places. A drainage-tube always causes adhesions in its vicinity; a pedicle ligated and dropped does, temporarily at least, and often permanently if the ligature irritates, with or without being infected. In the case of infected ligature a sinus follows, further increasing the amount of adhesions and, remaining open, causes suffering and annoyance for weeks, or months, or forever. Operations to remove such ligatures are occasionally required, and sometimes fail. Fecal and vesical fistulæ sometimes complicate such a sinus, and when the whole trouble is closed up, the adhesions it has caused are extensive and

there is more or less pain and disability while the patient lives. We avoid all these causes and results of adhesions, except in small degree, the freeing of old adhesions and allowing the bowel to form new attachments. As a rule, before operation the intestines are already in a better position than we can put them by any change. If we do not have to break them up to go through to operate on what is below, we can leave them as they are. There was not obstruction before, there will not be afterward, and with the removal of the focus of irritation, part of the old adhesions will be absorbed.

One case has been reported, making an unnecessary exception. The bowel became adherent to the wound and obstructed. The operator states, as any one can understand, that had he made a digital examination and released it there would have been no trouble. It illustrates a point I make later in my paper, that whatever occurs during convalescence is easily accessible all the time, and all operators look back to the times when something went wrong and they would have given anything to know just how the site of operation was.

Less anesthetic is used. Complete relaxation is not required, but only absolute insensibility. I am sure we do not sufficiently realise how much of prostration, nausea, faintness and suppression of urine are due to ether or chloroform intoxication. We agree that anesthesia is attended with slight danger of sudden death, and recently we are coming to know that other bad effects are present in nearly every case and increase directly with the dose given.

Stitch abscesses are out of the question, of course, and as we have no mural abscesses or drainage through the abdominal wall and as there is no abdominal incision, hernia also is an impossibility. The frequency of hernia in laparatomy wounds can never be known, but it occurs with every operator, by every method of closing the wall, even by permanent sutures, and they frequently irritate. Abdominal scar itself is not so great a detriment, yet any woman or man will be pleased to do without it. Pain, vomiting, thirst and prostration during the first hours are infinitely less than after laparatomy. The woman is nearly always comfortable as soon as she is really conscious and on the second day she is contentedly resting, taking abundant nourishment and growing strong. At the end of the third or fourth day she sits up in bed, next day she is out of it, and goes home some time between the fifth and fourteenth. Two weeks is the longest period of hospital

care; five days the shortest. Please compare that with other celiotomies.

The complexion and facial expression, right from the first, are almost normal. There is none of the pale skin and anxious look or lines of pain. None of the faintness, nausea and utter prostration, so near impending dissolution, in the worst cases. The temperature, on the whole, ranges lower too. There is no troublesome tympanites.

All the pelvis can be easily palpated, part of it more readily than from above, and nearly all of it can be seen. Tubes and ovaries changed by disease can be removed or conservative work upon them can be done. Fluid tumors of all sizes, including abscesses, are operable. Solid tumors reaching to any height below the umbilicus can be taken out. Extrauterine pregnancy is accessible, and masses of adhesions already infected afford the most advantageous condition for preferring the vaginal route. It shows all its points of superiority in a case of universal adhesions with multiple abscesses and sinuses honeycombing in all directions, some of them communicating with intestine or bladder. Ordinarily such patients die from chronic sepsis and exhaustion or from acute sepsis if operated upon. But open from below, remove as much as possible of the disease, leave the perfect drainage, never attainable except through the vagina. All will heal in *a few days* and the woman goes home in two weeks cured, except that the intestinal or vesical fistula when present nearly always heal in two to six weeks. I am speaking of cases practically inoperable from above. They get well. "The extremity of the laparatomist becomes the opportunity of the vaginal celiotomist." Hysterectomy can be done, of course, and is safer by vagina. Small tumors can be taken from any part of the uterus, within, or upon any portion of it and the organ left sound and whole, instead of their being temporised with until they make hysterectomy necessary. Thomas's spoon saw is almost abandoned for submucous growths, because of the danger of its going clear through and causing fatal peritonitis or laceration of intestine. With two fingers applied through the vaginal vault over the site of operation, it can be used with impunity even if the growth is so deeply seated as to require resection of the whole thickness of the uterine wall.

Subserous growths can be taken from anywhere on the uterine surface. Ovarian cysts of large size can be emptied and extracted the same as through any other opening. Small ones are better for

this method. Very firm adhesions high up may make another way preferable. If universal adhesions make it impracticable to remove one by any method, it can be opened per vaginam, emptied, and packed and drained with gauze, to be obliterated by granulation more safely than by any other treatment. Large hard tumors of pelvic origin if liable to bleed would be more rapidly and safely removed by laparatomy, if all vessels and tissues to be reached from below were first ligated and divided that way. Not very long ago I lost such a patient from hemorrhage and shock who would be alive today if we had been doing that at that time.

Anteflexion of the uterus has no satisfactory treatment for most of the cases that need it. It is mainly due to attachments of the bladder so highly anteriorly that the fundus of the uterus is drawn forward and downward. On the 26th of last June I operated for this condition upon a patient who had dysmenorrhea since puberty. After thorough dilatation, curettage and tamponade the organ resumed its malposition immediately. Thereupon I opened the anterior vaginal vault, severed all anterior attachments and it straightened out at once like a steel spring. I have examined the patient frequently since and she is anatomically and symptomatically cured. Theoretically the method is correct and it has the evidence of one successful case toward proof, practically. It is original with me, though others probably have thought of it before I did. In the New York *Medical Record* for July 20, 1895, Dr. William R. Pryor describes an operation on similar principles for retro-displacements. Vaginal tamponade is an essential part of after treatment and results have been extremely satisfactory. I can give testimony from my own experience in its favor.

All the operations can be done for acute sepsis, puerperal or otherwise, in uterus, tubes, ovaries, pelvic peritoneum and cellular tissue, enabling us to stop this process in the beginning and avert prolonged suffering, with destruction of important organs, or save the life of the woman, avoiding the necessity of operation later for incurable disease. The importance of this is beyond comprehension. Ninety per cent. of mutilating disease of female generative organs begins as acute sepsis, begins as inflammation, localised, but very soon to destroy a most important organ or more than one. A phlegmon anywhere else endangering a vital part would be opened early, drained of serum and poisoned blood; inflammation would stop where it was and neighboring tissues be saved from destruction. The same can be done by vaginal celiot-

omy, as soon as pus is formed, even before that. If it be done, a large proportion of the present gynecic surgery will not be needed, a great deal of this disease will be averted. To a far greater extent than now will it be the healing art instead of the last resort of removal of what we cannot cure.

In many cases the procedure is slow and in all it lacks every dramatic element of a brilliant, rapid operation, but that can be no criticism when we consider its superb results and there is almost never a tragedy upon which to drop the curtain.

Contrary to a general impression it is not working in the dark. Every step of an easy case may be done under the senses of vision and touch. Difficult ones must be done in part by tactile sense alone, but that is equally true of other methods ; and afterward all processes of repair with possible accidents remain accessible all the time, so that during the most important period all is in the light when otherwise it would not be.

Injury to intestines, ureters and bladder are less liable to occur, because it is easier to push them out of the way and keep them there and because it is not necessary to go through an adherent mass of them to arrive at the place of the operation proper.

"It is difficult," yes, and to this objection I willingly assent, but shall we reject a superior measure because it sometimes requires greater skill ? There have never been such results as this operation is demonstrating. Many have been restored to health who would have died with our best skill. Jacobs, of Belgium, has had 413 cases, including every condition that can occur within a woman's pelvis, excluding those not serious enough to require total extirpation of uterus, tubes and ovaries, and there were only twelve deaths. Pozzi has had 144 consecutive nonmalignant cases all recovered.

If there is any way by which better work can be done, I want to learn it and give up this. There never has been any approach to such results.

I wish to be understood that it is not suitable for all conditions, that some should never be attempted from below, and circumstances will occasionally make it necessary to abandon work already begun and finish it from above, and that no one should do it at all who is not already familiar with ordinary laparatomy and prepared to change from one to the other.

There are four cardinal reasons for vaginal celiotomy. You avoid sepsis, shock, hemorrhage and intestinal obstruction. They

are not the only ones I urge, but discard all the rest and these alone are sufficient to demand that what can properly be done by this way shall not be done by any other.

215 LAKE AVENUE.

DISCUSSION.

Dr. A. B. MILLER, Syracuse: The paper read by Dr. Jones is one certainly of marked interest, treating upon a subject which is, perhaps, engaging the attention of the surgical profession as much as any other at the present time. It was a question in my mind, how the author was going to reconcile the conditions of vaginal celiotomy. I readily see now that his method is getting into the abdominal cavity by another route and probably strictly is not a celiotomy. This method is the one that is being practised now by abdominal and gynecological surgeons in preference to the old method of removing diseased structures through the abdominal opening, with a much less mortality attending. While, theoretically, the old method would appeal to our reason as affording greater opportunity for recovery, the mortality was large and practical experience teaches us that the pathological pelvic conditions can be successfully removed through the vaginal route and that a much less mortality attends this procedure.

I again wish to congratulate Dr. Jones in bringing this subject before the society and the able manner in which he has treated it.

Progress in Medical Science.

DISEASES OF NOSE AND THROAT.

REPORTED BY HENRY J. MULFORD, M. D.,
Clinical instructor in diseases of the nose and throat, Medical Department, University of Buffalo.

ADENOID VEGETATIONS.

IN A PAPER, read last year before the Fifth International Congress of Otology at Florence, Dr. Y. Arslan, of Padua, states his conclusions as to etiology and treatment of "adenoids," after having seen over four hundred cases. Amongst 4,080 patients suffering from affections of the nose, throat or ear, 426 had adenoid tumors in the vault. Of these 69 per cent. had symptoms of nasal obstruction, 37 per cent. suffered with tonsilitis or pharyngitis, 59 per cent. had ear complications, of whom 110 were cases of suppurative otitis and 142 were cases of deafness without suppuration. Of six deaf mutes with adenoids two were benefited by

their removal. Other complications noted were bronchitis, laryngeal spasm, night terrors, stammering, nocturnal enuresis and convulsive attacks. A case of Jacksonian epilepsy, thought to be of central origin, soon disappeared after operation.

Much importance is attributed to heredity and general diseases as causes. In sixty cases, noted traces of heredity. Dampness and other causes of secondary importance.

Treatment consists in complete removal. Advisable to operate even when the masses are small. The operation should be completed at one sitting. As regards direct complications, the operation is certain in its benefits; for reflex complications the result is not so positive. Disappearance does not always take place with age, for the growths were found in patients ranging from twenty to forty years.

General narcosis should be employed, otherwise a simple operation is made complicated, long and brutal, especially as the majority of our patients are children, in whom we cannot expect complete docility. Cocaine insufficient. Of the anesthetics gives preference to ethyl bromide. Superior to chloroform or ether for short operations. It is rapid and certain in its action, harmless in the dose employed (10 to 20 grammes), and leaves no disagreeable consequences. Gas might do as well, but not so handy. Collected 4,161 cases of anesthesia by ethyl bromide, in which some unsuccessful cases were noted, but not one death. Has used it 252 times without seeing the least disagreeable symptom. It should be given by what is called the intensive method. Up to fifteen years, 10 grammes are enough; above that age the dose may be doubled.

Prognosis good. Nasal obstruction disappears. The healing of suppurating otitis, unless there is extensive caries, is hastened. In deafness without suppuration, nearly always rapid recovery of hearing. In adults, secondary lesions of tympanum and ossicles may be unchanged. In deaf mutes, when young, good results may follow. Often in reflex complications unexpected and brilliant results may be obtained.

Conclusions.—(1) In Italy this condition is fairly frequent. (2) The chief causes are heredity and general affections. (3) The operation should be completed in one sitting. (4) Ethyl bromide the best anesthetic. (5) Auricular affections are in great part due to adenoid vegetations, both during the period of development of the latter and during their retrogression. (6) In

all cases where adenoid tumors have been diagnosticated there should be no delay in their removal. (7) Before children are admitted into asylums for the deaf and dumb, or similar institutions, they should first be submitted to examination by a specialist.—(Abstract of translation published in the *Journal of Laryngology, Rhinology and Otology* for December, 1895.)

THE CIGARETTE HABIT.

ABSTRACT of paper by Dr. Mulhall, with discussion, read at last meeting of American Laryngological Association. From the *Journal of Laryngology, Rhinology and Otology :*

Chewers, smokers and snuff-takers each derive a special satisfaction from the use of tobacco. Cigarette smokers, from habit of inhaling, derive more pleasure than cigar or pipe smokers. The smoke does not penetrate into pulmonary structure beyond the first division of the bronchi. The smoker used to certain degrees of satisfaction does not find it in either a milder or stronger cigarette or in a cigar. The feeling experienced is a pleasurable irritation of the laryngeal and tracheal fibers of pneumogastric nerve. It is a nicotine satisfaction.

Amount of nicotine absorption varies according to the extent of surface, which in inhalers is three times that of noninhalers. Three cigarettes have the nicotine strength of one cigar, and there is no reliable evidence to prove that cigarettes are adulterated with opium or other deleterious drugs. Cigarette smoking is a "deadly" habit, because of its frequency. Its effects are analogous to those of giving a drug in small and frequent doses.

The constitutional effects are those from tobacco in any form, always nicotinism. On the young the results are most pernicious. Locally it may aggravate preëxisting trouble, but it rarely originates any disease. There may result a slight hyperemia of the mucosa, or a slight catarrh, with pearly secretion ejected in small pellets with a single slight cough. Once in a while a whistling râle is heard over the bronchi, but only in the case of deep and excessive inhalers.

Mario, the great tenor, inhaled constantly and between the acts of the opera. Maxwell, the St. Louis murderer, while in prison inhaled forty cigarettes daily, and although he was a nervous wreck his throat did not show signs of disease, as was proven post mortem.

DISCUSSION.

Dr. INGALS could not accept the doctrine that tobacco did no harm to the throat, as he had seen pronounced tracheal cough in inhalers.

Dr. SEILER thought the habit of continual spitting was the real cause of the local trouble, as this led to abnormal dryness of the pharynx.

Dr. LANGMAID believed that he could tell by the color of the mucosa of pharynx if a man smoked or not. Cigars have less effect on throat than pipes, owing to the heat in the stem of the latter and to the relatively larger mass of fire in bowl. Effect on the young of tobacco in any form, was especially destructive to power of consecutive thought. As to Mario, it was notorious that he never really exerted his vocal powers more than once a week. The rest of the time he intoned. As a general thing, tobacco is distinctly deleterious to finer qualities of the singing voice.

MICROÖRGANISMS IN THE HEALTHY NOSE.

ABSTRACT of paper by Dr. St. Clair Thomson and Dr. Hewlett, of London, read before the Royal Medical and Chirurgical Society, London. Published in *Journal of Laryngology, Rhinology and Otology:*

Their results offer a striking contrast to those of the majority of previous observers, and directly oppose the opinion held by many physicians. About 500 liters of air, bearing on a low average 1,500 organisms, are inspired every hour. As the greater portion of this comes in contact with moist mucous membrane lining the nasal fossæ, it has been taken for granted that the interior of the nose must show a rich profusion of microörganisms.

The literature of the subject is gone over in chronological order. Only two papers found devoted entirely to bacteriology of normal nose; other reference to the healthy state only made incidentally in the course of researches on diseased conditions. Only two authorities—Loewenberg and Hajek—find a scarcity of bacteria in the nose; others record a greater or less variety and profusion. One observer finds the streptococcus of Fehlinsen present in one out of five healthy individuals; another found the diplococcus pneumoniæ (Fränkel-Weichselbaum) one in four. The latter observer often met the bacillus pneumoniæ (Friedländer), the streptococcus pyogenes and the staphylococcus pyogenes aureus not only in large numbers but often in pure culture.

The method of examination adopted by the authors was cultivations on agar and cover-glass preparations stained with gentian violet. No attempt made to differentiate the organisms. This research dealt with the presence or absence of bacteria. Thirteen healthy individuals examined. Twenty-seven cultures and fourteen cover-glass preparations made from vestibule of nose. Seventy-six cultures and thirty cover-glass preparations made from mucous membrane of nasal cavity. Summary of results: (1) In all investigations of this kind a clear distinction must be made between the vestibule of the nose and the proper mucous cavity. The former lined with skin and furnished with hairs and sudoriferous and sebaceous glands; not a part of nasal cavity proper, but only leads to it. (2) Neglect of this distinction may account for the discrepancy in previous observations. (3) In the dust and crusts of mucus and debris found among the vibrissæ of healthy subjects, microörganisms are never absent. As a rule the number is abundant. (4) On the Schneiderian membrane the reverse is the case. It is not asserted that microörganisms are completely absent; obviously some must occasionally occur, but normally they are never plentiful; are rarely ever numerous. In more than eighty per cent. none whatever were found and the mucus was completely sterile. (5) The occurrence of pathogenic organisms must be so infrequent that their presence on the Schneiderian membrane can only be regarded as quite exceptional. Clinical experience bears out above conclusions, and their applications in practice is sufficiently obvious.

DISCUSSION.

Mr. SPENCER WATSON thought it premature to conclude that vestibule and vibrissæ filtered out nearly all the organisms in air entering nose. Since the vestibule was ill-developed and vibrissæ only represented by down in children, it was improbable that in them microörganisms were thus arrested. The authors might reply that children were in fact more subject to respiratory affections than adults. This might be so, but before drawing a definite conclusion as to this function of vestibule and its vibrissæ further observations on children were required. The greater part of the nasal fossæ was confessedly inaccessible to bacteriological investigation; the anterior had been shown to be almost free from microörganisms, but it was possible that the microörganisms were carried past the smooth anterior parts, and came to rest on the more convoluted inaccessible parts. How was the automatic cleaning of the

nose done? Was it by filtration in the vestibule, or was it due to some active process in the deeper parts of the nasal fossæ, probably phagocytic in nature? The rapidity and ease with which wounds of the nasal membrane healed, to some extent supported the author's views, but wounds of the face generally, and especially of the eyelids, healed readily, possibly a result of the free vascular supply of the parts.

Dr. F. SEMON agreed that wounds of nasal membrane healed rapidly, and did not think it necessary to use antiseptics before operating. It was remarkable how the nose escaped the inflammations common in the lower respiratory tract. Tuberculosis of the nose one of the rarest diseases, and suppuration rarely occurred after nasal operations. From a clinical standpoint he thought it unlikely that microörganisms passed over the parts accessible to examination and settled in the deeper parts.

Dr. ALLAN MACFADYEN: The authors had shown what an efficient filtering apparatus the nasal cavity was for impurities of all kinds. A good part of this result might be due to the mechanical action of the vibrissæ and the presence of sticky mucus. Still, a certain number of organisms must pass up, and the question arose as to what became of them. That aroused the inquiry as to the possible action of mucus upon organisms. Perhaps the mucus was not a suitable soil for their growth, or perhaps it had a bactericidal action. The investigations of Santorelli in respect to sputum had shown that most organisms lost their virulence under its influence, with the exception of the diphtheria baccillus.

Dr. HABERSOHN thought the paper had an especial bearing on the clinical and pathological side as to how far absorption might occur from healthy nasal membrane. A view was generally held that all portions of the mucous membrane covered with ciliated epithelium were not the first infected, this being explained on the ground that the cilia kept the organisms moving, and so prevented absorption. Some years ago he had studied this with regard to the larynx, and had found that the parts covered with ciliated epithelium were not so frequently affected.

Dr. HEWLETT, in reply, said that although many microbes were arrested by the vibrissæ, it was not stated that this was the essential factor which prevented their getting into the nose. With regard to self-cleansing, several factors were to be considered. The protective power of ciliated surface was an important factor;

another was the question of phagocytosis. Another point which some experiments seemed to bear out was that the nasal mucus was not a nutrient medium for microbes. This quality prevented their rapid multiplication, as occurred in the mouth. Then there was the mechanical action of the mucus which, always trickling over the surfaces, must carry down microbes and dust. With regard to the arrest of bacteria they had made many observations which had been rather a failure.

Dr. St. Clair Thomson, in reply, said the original purpose of their investigations had dealt with the character of the bacteria, but when it was found how rarely microörganisms of any kind were found in the nose, they decided to publish this fact by itself. The objection had occurred to him in regard to the vestibule of children's noses, and he had examined as many of their noses as possible. All of them were found to be lined with down, well moistened with mucus and often showed collections of dust. It was difficult to imagine that any microbes could escape impinging on the anterior mucous surfaces. With reference to the part played by ciliated epithelium he mentioned two observations by Sir Joseph Lister. The first referred to collections of blood and pus in the pleural cavity. When this communicated with the air through the bronchus the pleural contents became septic much less readily than in cases where there was communication with the air through chest wall. This difference he ascribed to the action of the ciliated epithelium. The second observation referred to cases of fracture of base of skull involving middle ear, with rupture of drum. Lister insisted on keeping the external meatus aseptic, as he held that most of the after-mischief was due to septic infection. When it was suggested that the entrance by way of the Eustachian tube was unprotected, he held that this approach was well guarded by its ciliated epithelium.

MEDICINE, PATHOLOGY AND THERAPEUTICS.

Conducted by a member of the editorial staff.

THERAPEUTIC VALUE OF BENZOSOL.

White, (*Richmond Journal of Practice*, January, 1896,) in discussing this subject, says that benzosol is a combination of the ethreal salt of guaiacol and benzoic acid ; that when administered by the mouth it is not dissolved by the juices of the stom-

ach, but the guaiacol is liberated in the intestinal canal and is subsequently excreted by the kidneys with the benzoic acid.

White affirms that the great advantages of benzosol are its comparative freedom from odor or taste and its readiness of assimilation; that digestive disturbances very rarely occur during its administration; that no ill-effects have been observed, but that the limit of dose mentioned (a dram a day) has not been exceeded.

White then details its use in phthisis and other tubercular diseases, giving the studies of Walzer, affirming, however, that his own cases most benefited were those which manifested a marked catarrhal condition of the lungs in the early stage, and even such as were well advanced, with formation of cavities and excessive expectoration. He further testifies to the value of the drug in gastric and intestinal dyspepsia and in diabetes, relating his own experiences in considerable detail. In speaking of its effects on the latter disease, he says:

> Not only are evidences of good to be noted in the change of the condition of the urine, but the general health also responds under its favorable influence, as shown by increased appetite, facilitation of the processes of digestion and assimilation with the resulting improvement in nutrition.

TREATMENT OF DIPHTHERIA AT THE HARPER HOSPITAL, DETROIT, MICH.

Dr. B. S. Shurly, (*Therapeutic Gazette*, February 15, 1896,) house physician of the Harper Hospital, describes very carefully twenty-six cases of diphtheria treated with anti-diphtheritic serum, and draws the following conclusions:

1. The cases were under constant observation from the time of admission to discharge; this being in contradistinction to cases observed in private practice.

2. Nurses of the Farrand Training School were on special duty night and day.

3. Diagnosis of every case was verified by bacteriological examination.

4. Cases were not selected; admitted in all stages of the disease.

5. There were four cases of tracheotomy, two being combined with intubation. All recovered.

6. The use of repeated doses of the serum (P. D. & Co.'s) was of greatest improvement.

7. No case died that was treated within two days of invasion.

8. No case developed laryngeal stenosis after anti-diphtheritic serum was given.

9. No case developed anuria, convulsions or severe hemorrhages.

10. No abscesses.

11. No deleterious effects.

12. None of the cases under treatment became septic.

13. No constant effect on the temperature or pulse. Temperature above 102° usually fell 1 to 5 degrees in fifteen hours.

14. The membrane loses its progressive character under this treatment.

15. No case of heart paralysis or other heart lesion followed.

16. Four cases very suddenly improved.

17. Sixteen cases were above average severity.

18. Albuminuria developed in eight cases. No casts found.

19. Paralysis was not prevented; four cases or 16 per cent. developed. Average, without antitoxin, 10 to 20 per cent.

20. Rash developed in eight cases, quickly disappearing.

21. There were two deaths, or 8 per cent.; one being moribund on admission.

22. One case recovered with typical reaction when injected on the eleventh day of the disease.

23. The serum does not interfere with the use of local disinfectants or antiseptics.

24. Subsidiary local and constitutional treatment must not be neglected.

25. It is a specific remedy when used early.

WATER.

WHEN judiciously taken in half-pint doses as a laxative in the morning, as a sedative at night, as a diuretic when the skin is cool, as a diaphoretic when the skin is warm, as an expectorant or a refrigerant, its value is remarkable.—*Pye-Smith.*

COLD IN THE HEAD.

GELSEMIUM is the most potent drug known for the relief of this unpleasant condition. If taken early, drop doses of the fluid extract administered hourly usually secure most satisfactory results. —*Medical Summary.*

An equally efficacious procedure is the administration of aromatic spirits of ammonia and of the sweet spirits of nitre—

15 to 20 M. of each—every alternate hour, for twenty-four hours. These remedies have the effect of stimulating the secretions and thus counteract the first symptoms of an ordinary cold and abort it. Try it.—*Reporter*.

INQUIRIES RELATING TO THE COMPARATIVE VALUE OF EXPECTORANTS AND COUGH REMEDIES.

CROOK, in the *Medical Record* of February 22, 1896, makes an interesting report on the efficacy of different drugs for the relief of cough, and tabulates his results as follows:

REMEDIES TESTED.	RESULTS OBTAINED.				
	Total Cases.	Success.	Partial Success.	Failure.	Remarks.
Aconite	12	..	1	11	Case of cardiac hypertrophy.
Ammon. bromide	18	..	12	6	Unselected cases.
Ammon. carbonate	40	10	15	15	" "
Ammon. chloride	60	25	20	15	" "
Antimony	24	8	12	4	" "
Apomorphine	22	8	12	2	Adults of good physique.
Chloroform	12	2	6	4	Mild bronchial coughs.
Codeine	16	..	16	..	Unselected cases.
Creosote	30	6	24	..	Phthisis or suspected phthisis.
Glycerin	12	..	5	7	Unselected cases.
Glycyrrhiza	20	..	20	..	" "
Hoffman's anodyne	10	..	5	5	Cases of bronchitis accompanied by asthma, emphysema or cardiac palpitation.
Hydrocyanic acid	24	..	16	8	Unselected cases.
Ipecac	30	5	20	5	" "
Opiates. { paregoric / morphine	15	3	10	2	" "
Phenacetin	30	8	20	2	" "
Potassium bromide	10	..	..	10	" "
Potassium iodide	37	..	15	21	" "
Squill	20	..	16	10	" "
Sodium chloride	12	..	8	4	All mild cases of bronchitis or tracheitis.
Terebene	20	2	14	14	Unselected cases.
Terpin hydrate	15	..	3	2	" "
Tolu	15	2	10	3	" "
Wild cherry	10	..	4	6	" "

The author lays no claim to originality in the observation that few cough remedies possess any great value when given alone. The best results are achieved by a scientific combination of two or

more remedies, having due regard for their chemical compatibility, their physiological actions and their applicability in individual cases. The following formulas have been thoroughly tested by the writer in hospital and private practice, and may be trusted to render good service in properly selected cases:

1. For irritative coughs:

℞ Phenacetin ..... gr. xx.–xl.
Ext. glycyrrhizæ ..... gr. xx.
Sacch. albi ..... ʒ ij.

Fiat pulvis, in chartulas xx. dividendus. S. One to be taken at one, two or three hour intervals.

2. For same of more obstinate character:

℞ Phenacetin ..... gr. l.
Ext. glycyrrhizæ ..... gr. xx.
Codeinæ sulphatis ..... gr. ij.–gr. iv.
Sacch. albi ..... ʒ ij.

Fiat pulvis, in chartulas xx. dividendus. S. One to be taken at one, two and three hour intervals.

3. When an expectorant effect is desired:

℞ Extracti glycyrrhizæ ..... gr. xx.
Phenacetin ..... gr. xx.–xl.
Ammonii muriatis ..... ʒ i.–ij.
Sacch. albi ..... ʒ ij.

M. et in chart. xx. div. S. One powder to be taken in a little water every two, three or four hours.

4. A good stimulating expectorant for adults:

℞ Apomorph. hydrochloratis ..... gr. i.
Syr. ipecacuanhæ ..... fl. ʒ ij.
Syr. tolutani ..... fl. ℥ i.
Aquæ dest ..... q. s. ad fl ℥ iij.

Ft. mist. S. A teaspoonful five times daily at four hour intervals. Shake well before using. Prepare freshly as required and keep in a dark-colored bottle.

5. A good stimulating expectorant for every-day bronchial and phthisical coughs:

℞ Ammonii muriatis ..... ʒ ij.
Tincturæ opii camphoratæ,
Spiritus chloroformi,
Syr. ipecacuanhæ ..... āa fl. ʒ ij.
Syr. prun. virginianæ ..... q. s ad fl. ℥ iij.

M. S. A teaspoonful every three or four hours. Shake well before using.

6. For weak and fruitless coughs with loss of bronchial power:

℞ Ammon. carbonatis..... ʒ i.–ij.
Tinct. tolutani..... fl. ʒ ij.
Syr. senegæ,
Spiritus vini gallici,
Syr. simplicis.....āā fl. ʒ iv.
Aquæ destillatæ.....q. s. ad fl. ʒ iij.

Ft. mist. S. A teaspoonful in a little water every two, three or four hours.

7. For asthmatic and emphysematous coughs:

℞ Spiritus ætheris compositi ..... fl. ʒ iv.
Potassii iodidi,
Ammon. muriatis .....āā ʒ ij.
Codeinæ sulphatis..... gr. ij.
Syr. tolutani..... fl. ʒ iv.
Aquæ des.....q. s. ad fl. ʒ iij.

M. S. A teaspoonful every two, three or four hours.

8. For recurring bronchitis or winter cough:

℞ Terebene..... fl. ʒ vi.
Ol. eucalypt. ..... fl. ʒ ij.

M. S. Ten to fifteen drops on a little sugar every three or four hours.

WATER IN THE TREATMENT OF NEURALGIA.

Dr. Buxbaum, according to the *Charlotte Medical Journal*, first called the attention of the profession to this mode of treating neuralgia. He thinks that the hydrotherapeutic treatment of this disease has hardly received the attention which it deserves. In neuralgia of rheumatic origin it acts by inducing increased blood supply to the affected parts, and in the neuralgia following upon infective diseases, or due to intoxication by mercury or lead, it promotes the elimination of the poison.

He reports that in eighty-three typical cases of neuralgia this treatment was unsuccessful only in 10 per cent., whereas 60 per cent. were cured and the remainder considerably relieved. The alternate application of heat and cold is most to be recommended. The patient is exposed to high temperatures, and afterwards cold applications are made. The alternating Scotch douche is particularly of service. Recent neuralgias may often be cut short in this way. Patients with sciatica treated without effect by various therapeutic measures, even including nerve stretching, have been

cured in a short time by this method. If the neuralgia persists it is nearly always due to some irremediable cause, with the exception of some few cases open to operation. If a remission occurs after the treatment has begun, it shows the neuralgia is curable, and is, therefore, of prognostic value. In trigeminal neuralgia, hydrotherapeutic measures applied to the whole body are the most suitable. Of course, other indications should be attended to, such as anemia, malaria, and the like.—*St. Louis Clinique.*

SUMMER DIARRHEA OF CHILDHOOD.

RARDIN, J. S., (*Cincinnati Lancet-Clinic,*) in commenting on the various methods of treatment comes to the following conclusions:

Astringents, which were formerly so extensively used, have very properly been relegated to the waste dump as useless.

1. Summer diarrhea is caused largely by improper and unclean feeding, and is largely preventable.

2. Bacteria plays a very important part in its development.

3. Hot weather has to do only in an indirect manner, as it promotes the growth and development of bacteria in the food-supply.

4. Treatment consists, first, in eliminating all decomposing food from the bowels by cathartics, lavage and colonic irrigation.

5. Drugs, judiciously administered, are of great value, but are secondary in importance to prevention and management.

MEDICAL EDUCATION AND STATE MEDICAL EXAMINATIONS.

CONDUCTED BY WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.

Member New York State Medical Examining and Licensing Board.

President National Confederation State Medical Examining and Licensing Boards, 1896.

UNIVERSITY OF THE STATE OF NEW YORK MEDICAL EXAMINATIONS.

EXAMINATIONS for license to practise medicine in this state will be held as follows:

Dates.—1896: April 7-10, May 19-22, June 16-19.

Places.—New York, Albany, Syracuse, Buffalo. Each candidate is notified as to exact place.

Daily Program.—Tuesday morning, 9.15—12.15, anatomy; afternoon, 1.15—4.15, physiology and hygiene. Wednesday morning, 9.15—12.15, chemistry; afternoon, 1.15—4.15, surgery.

Thursday morning, 9.15—12.15, obstetrics; afternoon, 1.15—4.15, pathology and diagnosis. Friday morning, 9.15—12.15, therapeutics.

NATIONAL CONFEDERATION OF STATE MEDICAL EXAMINING AND LICENSING BOARDS.

THE executive council of the National Confederation of State Medical Examining and Licensing Boards has issued the following circular, which emanates from the office of the secretary, Dr. Benjamin M. Griffith, Springfield, Ill.:

The sixth annual meeting of this organisation will be held in room No. 1, Hotel Aragon, at Atlanta, Ga., Monday, May 4, 1896, at 10 o'clock A. M.

The following program will be carried out—namely:

1. Introductory remarks by the vice-president.
2. Report of the committee on revision of the constitution and by-laws.
3. Discussion and action thereon.
4. Report of the secretary.
5. Annual address of the president.
6. Address. Preliminary education, training and practice in New York. By James Russell Parsons, Jr., director of examinations, University of the State of New York, Albany.
7. Paper: Some obstacles to an inter-state recognition of a state license to practise medicine, with suggestions for their removal. By Charles McIntire, M. D., Easton, Pa.
8. Paper.———By Jos. M. Mathews, M. D., Louisville, Ky.
9. Paper.———By Wm. S. Foster, M. D., Pittsburg, Pa.
10. Miscellaneous business.
11. Election of officers.

The objects of the confederation, though purely of an advisory nature, are to discuss questions that pertain to state licensure in medicine with a view to a comparison and improvement of methods, a collection and dissemination of information on the subject, and to consider any and all propositions that have for their purpose the advancement of the standard of medical education in the United States.

The officers of the confederation, therefore, beg to extend a cordial invitation to members of state examining boards and all ex-members of state boards, as well as to every physician and educator who is friendly to the objects sought, to attend the meeting and participate in the proceedings.

THE REGENTS' DEPARTMENT.

THE annual report of the regents was made public in the legislature, February 11, 1896. It discusses at length preliminary and professional requirements for degrees. It reviews briefly the question of dental law and medical students' examinations, showing New York to be in the lead in all that tends to uniform standards in the professions. The report mentions the attempts made by other states to adopt regents' standards and the influence of the regents' registered list in the elevation of the character of the institutions seeking recognition. Credentials were received last year in twenty different languages from applicants for professional certificates. The consideration of these credentials involves a careful study of the educational system throughout the world. It is safe to say that the registry list of the Board of Regents of the University of the State of New York is the most complete in existence, furnishing information to inquiries from the most remote quarters of the globe.

It is easy to show that New York is the leading state in matters pertaining to higher medical education. Since 1892 there has been a growth of about 700 in the number of medical students and of more than 400 in the number of medical students from other states and countries who have come to study in New York institutions. There has been an increase of over 500 per cent. in the number of post-graduate students. The sum invested in medical schools increased from $2,764,530 in 1891 to $4,061,293 in 1895, and the amount of money expended for medical education increased from $365,405 in 1891 to $697,653 in 1895.

The recommendations of Secretary Dewey and his review of the work of the various departments had not been completed when the report was made public.

METHODS OF MEDICAL TEACHING.

THE American Academy of Medicine, which holds its annual meeting at Atlanta, May 2 and 4, 1896, announces a discussion on the above subject as follows:

I. *Preliminary.*—(1) The preparatory mental discipline for the medical student; (2) The subjects to be known before beginning the study of medicine, Dr. F. N. Gerrish, Portland, Me.

II. *Methods.*—(3) The lecture and its uses, Dr. C. B. Penrose, Philadelphia. (4) Text-book recitation and its advantages, Dr. DeLancey Rochester, Buffalo, N. Y. (5) Laboratory methods,

Dr. V. C. Vaughan, Ann Arbor. (6) Clinical instruction, Dr. J. Madison Taylor, Philadelphia. (7) The Seminar method, Dr. Bayard Holmes, Chicago. (8) Pass examinations; (9) The final examination, Dr. E. L. Holmes, Chicago. (10) Students' medical societies, Dr. Roswell Park, Buffalo, N. Y. (11) State examination, Dr. J. McPherson Scott, of the Maryland board. (12) The best method to teach anatomy, Dr. J. B. Roberts, Philadelphia. (13) The best method to teach physiology, Dr. C. D. Smith, Portland, Me. (14) The best method to teach inner medicine, Dr. J. C. Wilson, Philadelphia. (15) The best method to teach surgery, Dr. J. S. Wight, Brooklyn. (16) The best method to teach obstetrics, Dr. J. C. Edgar, New York. (17) The best method to teach state medicine, Dr. George H. Rohé, Catonsville.

MEDICAL TRAINING IN NEW YORK.

THE standard of medical education (*New York Tribune*) in this state is threatened with a serious danger. Through a series of years it has been the aim of the regents of the university, in coöperation with the leading physicians, to prevent the medical degree from being conferred in New York on any but men of high character and attainments. Their task has not been easy. Incompetent persons seek to gain admission to every profession, and schools are always to be found willing to further their designs. Every effort to sift more carefully applications for permission to practise medicine has been strenuously resisted, but finally the requirements for degrees have been made uniform and sufficiently strict to guarantee the fitness of the recipients for their work. It appears, however, that these regulations affect injuriously the interests of some students, who deem themselves none the less competent for general practice because they cannot technically comply with the law, and of some teachers, who believe they can educate physicians as good as any on somewhat easier terms than the statute permits. Accordingly there is now a bill before the legislature, introduced by Mr. Stanchfield, changing the requirements for medical examinations.

At the hearing before the judiciary committee of the assembly, leading doctors from all parts of the state and representatives from many of the medical colleges presented weighty objections to the Stanchfield bill, and the state medical society, through its committee on legislation, sent a protest. It was urged that there

would be little objection to the four-year course proposed, if the enactment did not carry with it the practical repeal of present safeguards for the protection of people from improper treatment and open the door to abuses and the cheapening of the medical degree. The examinations under the present law are denounced as "arbitrary" by those who favor the Stanchfield bill, but arbitrary requirements in such a case are surely preferable to loose ones. The proposed measure orders examinations for matriculation in medical colleges and certain studies are named as essential, but no standard of perfection is prescribed, and every medical school is left free to matriculate students on its own terms, so long as it goes through the form of examination.

Exemption is also allowed to graduates or matriculates of "reputable colleges or high schools of the first grade," leaving it to the examining officer to determine for himself what colleges and schools are "reputable." The safeguards as to age, character and satisfactory instruction are left out of the law, and a medical school which so conducts itself as to retain its charter can graduate students without making them conform to any general standard of excellence. Moreover, the bill is so drawn that students have a year in which to matriculate under the present law, and thus secure exemption from the necessity of studying four years, and afterward may take advantage of the want of restrictions in the substitute measure against the invasion of the ranks of the medical profession by men of bad character and inadequate preparation.

The general welfare demands that no person shall be intrusted with the health and lives of others who has not proved, under the most rigid scrutiny, his competence for the task and the good faith in which he will perform it. The practitioner must keep pace with the progress of science and the medical degree must year by year come to stand for greater knowledge and ability. To secure this, severe rules must be enforced on all. Doubtless such rules cause hardship in some cases and keep out of the profession individuals who might practise it worthily. The honesty and ability of the management of particular schools which might desire a larger liberty may be conceded. But the fact must be faced that there are unprincipled persons ever ready to take advantage of a loophole in the law; and while those who now favor the Stanchfield bill might conduct themselves under it with perfect propriety, there is no guarantee that others might not abuse the opportuni-

ties it would give them. The fact that students find it easier to get diplomas in other states is no valid ground for making degrees cheap here. The first duty of the State of New York is to make its medical degrees as good as any in the world. We have long been working in that direction. There should be no retrogression.

ADVICE TO THOSE WHO CONTEMPLATE THE STUDY OF MEDICINE.

THE *British Medical Journal* for September 7, 1895, has some very wise words for young men who are considering the advisability of entering the medical profession. It is of the utmost importance, it says, that the student and his advisers should have a clear idea of the object to be aimed at. Life-long disappointment may be the consequence of a false step at the outset. Among the careers in which the highest prizes are open to all who have wit and energy and can afford the cost of the necessary course of study, medicine offers to many the highest attractions. The scientific character of the study, the purely personal nature of the work, the life of intimacy with many people of many ranks, the possibility—dim perhaps, but still the possibility,—of wealth and honor, and the almost certainty, at least, of bread and cheese as the reward of patience, sobriety and hard work, are sure to draw many to medicine as their career in life. Those who find their way to wealth, influence and position are few. To the majority who commence their professional studies in medicine in October, medicine will prove a harsh mother, and will give little beyond the necessaries of a simple and frugal life. The man who is to succeed must give himself up to being a student for five years at least, and that means that he must have sufficient capital to keep himself during that time as well as to pay the necessary fees. It is no small matter to fix one's life beforehand for a certain five or six years, and the importance of the decision is in no way lightened by the knowledge that a medical education is peculiarly special, leads to little else but medicine, is of no service in obtaining entry into any other profession or even trade, and that unless it can be carried through to the end it means so much loss of time.—*Canadian Medical Review.*

PENNSYLVANIA STATE BOARD OF MEDICAL EXAMINERS.

THE State Board of Examiners for a license to practise medicine in Pennsylvania has passed over its first year (*Post-Graduate*), and

according to Dr. Cranch, of Erie, a member of that board, "over 5 per cent. of all schools failed utterly, and many papers, even among those finally passed, showed a deplorable lack of general and special culture." In the opinion of the Pennsylvania examiners the new law has been fully justified. There is no doubt that this is the case in New York after some three or four years of experience.

Dr. Cranch also believes that through the laws creating medical examiners "we shall finally see the cessation of medical sectarianism by demonstrating," as he says, "the real unity of all schools on most subjects." These laws are accomplishing much, so that we may hope to see the day when the only name to a medical practitioner will be physician or surgeon.

THE Georgia state examining boards, in 1895, (*Atlanta Medical and Surgical Journal*,) examined and licensed 125 applicants; 105 were regulars, thirteen eclectics and seven homeopaths. It is said to have been the policy of the boards not to be too severe in their examinations all at once. It is expected that they will be more rigid in the future. We hope that the boards will see that the spirit and letter of the law are fully carried out. Its friends look to it as the only means of protecting our people from hordes of medical tramps and numbers of incompetent graduates. The law is a good one and deserves to be carried out.

OREGON STATE MEDICAL EXAMINING BOARD.

THE *California Medical Journal* has published a paper on the subject of the Oregon State Medical Examining Board, (*Medical Sentinel*, February, 1896,) written by Dr. McConnell, of the board, in which we note that during its first six months forty-three applicants have been examined. Of these, several have been obliged to take a second examination. Of the total, forty-three, examined, forty-two have passed the board. On July 2d, fourteen were examined and six failed, but on August 1st these six were reëxamined and all passed the board. Of those examined, thirty-seven were regulars, three eclectics and two homeopaths. The unfortunate individual who failed to pass was an "allopath." Dr. McConnell says:

In behalf of the new board, I may say that it is one of the many boards that cannot be bribed. At least, so far as I am aware, it has

been able to withstand the offers of all comers thus far. Just how long we may be able to keep this up I am not authorised to state.

OHIO STATE BOARD OF MEDICAL EXAMINATION AND REGISTRATION.

OHIO has at last been compelled, in pure self-defense, to pass a medical practice law, and we hope our good neighbor will soon be able to clear out the army of quacks and irregular practitioners that has made the Buckeye State a camping-ground for so many years. After struggling for several years with the legislature, the friends of reform in medical education finally triumphed, and what is known as the Kimmel medical bill became a law February 19, 1896. The following is a synopsis of the law:

The governor shall appoint seven medical men, constituting the "medical board," to serve one, two, three, four, five, six and seven years respectively, such board to be made up from the various so-called schools in proportion to their numerical strength, but no one "school" to have a majority of the board. A college graduate must present his diploma with his affidavit that he is lawfully possessed of the same, and give age and time spent in study. If the board finds the diploma genuine and from a legally chartered institute, he shall be granted a certificate, which must be filed with the probate judge. If a medical practitioner, not a graduate, furnish the board an attested affidavit, stating period and places where he practised, and such statement is satisfactory to the board, a certificate shall be granted. All other applicants for certificates, who are not legal practitioners under the laws, shall pass such examination as the board may require.

The Kimmel law also provides for the regulation of the practice of midwifery. All midwives must register with the probate judge of the county where they reside, giving age, education received, time of practice, and the like. Midwives shall have no right to perform version, treat breach or face presentations or use instruments. The bill provides for fees, penalties, revocation of license, and the like. It is not an ideal law, but it is a beginning and we hope will lead to a better one in the near future.

EFFECTS OF THE MEDICAL LAW IN RHODE ISLAND.

THE law regulating the practice of medicine in Rhode Island (*Atlantic Medical Weekly*, December 14, 1895,) has now been in

operation some over three months and satisfactory results have followed. In all, 480 certificates have been issued, of which 436 were on first or diploma form and forty-four on second or time limit form. The grounds for refusal have been numerous and consist of unprofessional conduct, itinerancy, inability to present satisfactory evidence of having been engaged in practice in this state prior to 1892 and refusal to submit to examination.

Many physicians out of the state have applied for certificates. Some are young physicians who really intend to locate in Rhode Island until they are convinced that the field is not sufficiently lucrative to warrant their remaining. Others have applied with the idea that it would be to their advantage to have certificates from all states, so that their way would be clear if they should wish to change their field, and yet others have applied for the purpose of ascertaining whether they could practise or not before coming.

In order to prevent mistakes in issuing certificates to the latter class, and to prevent promiscuous distribution of them throughout the country, the board made a ruling that no certificate should be issued to an applicant, no matter what his credentials, until he had located and established himself here for a sufficient length of time to assure the board that he intended to practise here. This ruling has proved a necessary one, and has prevented many from registering from outside the state.

SIX OUT OF NINE.

THE following list (*Medical Sentinel*) of those who passed the examination of the Washington State Board of Medical Examiners in January, 1896, is kindly furnished by Dr. W. W. Misner, secretary of the board: J. Janson, Seattle, University of Minnesota, 1892; Halfdan Slippern, Seattle, University of Minnesota, 1895; H. S. Goddard, Portland, Ore., Willamette University, 1888; M. L. Doom, Chehalis, Eclectic Medical College, 1874; Henry S. Strickland, Olympia, Physicians and Surgeons, New York, 1877; R. O. Ball, West Ferndale, Eclectic Medical Institute, Cincinnati. Three others failed to pass.

A CASE of tetanus is reported in the *Deutsche Med. Wochenschrift*, No. 36, in which the patient died in spite of antitoxin treatment. Eighteen injections of the serum were given. The patient had had trismus for nine days before the treatment was instituted.—*Polyclinic.*

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

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JUBILEE OF THE MEDICAL DEPARTMENT, UNIVERSITY OF BUFFALO.

THE medical profession of Buffalo is just now passing through a series of anniversaries. Last August the JOURNAL celebrated its semi-centennial by issuing a jubilee number that has received everywhere the commendation of our contemporaries. In January of this year the Medical Society of the County of Erie reached the seventy-fifth year-post of its life, which was appropriately accentuated by anniversary proceedings that already have been recorded in these pages. Now comes the Medical Department of the University of Buffalo reminding us that it has reached the half-century mark and that it proposes to commemorate the event by more than the ordinary ceremonies at its forthcoming annual commencement, that is fixed for May 5, 1896.

We are not informed as to the precise scope of these special observances, but believe that, among other things, an appeal is making to the alumni to come and attend the feasts, both intellectual and material, that their alma mater is preparing. It would seem appropriate that her children should gather and make merry on this extraordinary occasion, and we presume they will do so in large numbers.

In our jubilee number (August, 1895,) we gave a historical sketch of this institution, but in view of the event above alluded to it seems appropriate that we should refer again to some of the principal data connected with the history of the college.

The changes which have taken place since 1846 are many and noteworthy, but concern the medical department alone, inasmuch as until 1884 this was the only department in existence. Its first

home was in a church building upon the site of the present post-office and afterward in the old stone edifice on the corner of Virginia and Main streets, where it remained until 1893. It is within the memory of all how inadequate and imperfect in many ways was this structure for the purposes of modern medical teaching. There were but few teachers, a meager and ridiculously abbreviated course, no laboratories and poor equipment for very many years.

And yet the teachers, who were, so to speak, professional giants, did wonderfully good work in the light of those days. They were, indeed, in many respects in advance of their own period; or, at all events, were fully abreast of it in every way. Little by little improvement was made, until today we find the department occupying a well-appointed building, as handsome and as well designed for its purpose as any in the land. Its corps of instructors has increased from seven to fifty-seven, its course embracing every branch recognised as essential for a complete medical education, including laboratory instruction in biology, histology, pharmacy, chemistry and pathology, all of which are obligatory and thoroughly taught in spacious well-equipped laboratories. Clinics and ward classes are held daily in the practical branches, the students being thus brought into immediate contact with disease in its many forms.

One of the last acts of the medical faculty was to make a four years' course obligatory upon all future students. This will apply to all students entering in September, 1896. In every way the department has tried to aid the cause of higher medical education and today in this respect it stands at the fore with the leading medical colleges in the country.

Since 1884 a department of pharmacy, of law, of dentistry and of pedagogy have been added, all of which have successfully striven to uphold the reputation and worth of the university. There are now over seven hundred students in the several departments who have heartily coöperated with the officers and teachers to give name and fame to the institution. It will doubtless be the policy of the council of the university to create from time to time such additional departments as may be needed, and it is not too much to predict that the future will see in Buffalo a university that will rank with those now existing in other parts of the land.

The approaching commencement will be notable for its historic interest, as well as for its many interesting features. It should command a full attendance of the alumni.

TOPICS OF THE MONTH.

A TYPHOID fever epidemic at Elmira has been reported with a somewhat startling death-roll. It is asserted that the sewage of a number of towns and cities is poured into the Chemung river, which can have only one effect—namely, that of polluting and poisoning its water. Ice, too, is cut from that river and used at Elmira. It is a well-known fact that freezing does not destroy the poisonous germs of ice made from polluted water. We assume that here are ample causes for this outbreak of an infectious disease, which is recognised as preventable.

The prompt action of the health department in Buffalo has served to check a threatened epidemic through infected milk. A milk dealer was detected in delivering infected milk. He was prevented from further service to his customers and so the spreading of the disease was cut short. Had the health department of Elmira taken similar precautions, sickness and death to an alarming degree might have been prevented. These two lessons of cause and effect—of infection and prevention—teach their own moral.

IT IS reported that physicians in New York are finding it convenient to establish downtown offices in the large office buildings that are springing up in the business section. The argument in part is, that it divorces business from home interests, a condition of things never possible with office and residence under the same roof. In this day and age of specialties it may be practicable in many instances to establish this custom, particularly in great cities like New York, Chicago and Philadelphia. Nevertheless, it must ever remain as a well-established fact, that it is better for the general practiser of medicine, the family doctor, to keep his office and house together. He is often wanted in an emergency when time would be lost in reaching him through the uncertainty attending his whereabouts as between house and office, were they remotely separated. The young physician may start his professional career downtown amid the business whirl, but the well-established doctor will feel more in keeping with his calling to receive and serve his patients from the quieter surroundings of a residence population.

THE rapid strides that chemistry has recently made is a subject of much comment among those most familiar with its marvelous progress. The fact is, chemistry is the base of all the sciences, and to

it should be accredited such of the progress in medicine that is thoughtlessly bestowed elsewhere. Chemistry has done more to relieve the medical art of the opprobrium of nauseous dosage than any other and all influences combined. It extracts juices, alkaloids and other concentrated principles from crude mineral and vegetable sources, and serves them up to us in minute doses that are both potent and agreeable.

Synthetic chemistry, too, is a marvel of scientific accomplishment and is destined to become as useful as it is curious. It not only produces many useful drugs of the antipyretic and hypnotic series from coal tar, but it has lately turned its attention to the production of artificial musk from the same source. Though this is not chemically the same as real musk, its scent is undistinguishable from the latter, and it threatens to drive the real article out of the market. One of the greatest commercial triumphs in the way of an artificial flavoring is vanalline. This product is keeping down the price of vanilla beans, and it is likely, too, to drive the latter out of the market. Chemists know how to counterfeit lactic acid, and they make an artificial citric acid which cannot be detected from the sour of the lemon. It is hardly possible to determine what may be the ultimate results of these counterfeiting processes, but they are somewhat startling to contemplate and furnish a subject for serious thought.

The milk supply of a large city is always an important subject for study and discussion by the guardians of public health. It is one that has been very much in evidence in Buffalo for some time past. Nearly a year ago the Academy of Medicine, through Dr. Henry R. Hopkins, chairman of sub-committee, presented an elaborate and well-digested report on the subject that has attracted the attention of sanitarians throughout the country. Meanwhile, a number of prominent physicians have inaugurated a plan of supplying pure milk to such residents of Buffalo as may desire to purchase it. The physicians referred to are Drs. Irving M. Snow, H. R. Hopkins, DeLancey Rochester, Charles G. Stockton and Renwick R. Ross. They have effected an agreement with Mr. George D. Briggs, of Elma, N. Y., who is authorised to sell milk produced at his farm under the name of certified milk. In the contract with Mr. Briggs, he engages to put upon the market only pure milk from high-grade Jerseys, free from tuberculosis. He also undertakes that the cows shall be fed on the best grass and hay.

The water supplied to the cattle has been certified to by Prof. Herbert M. Hill, chemist. The appointments of the farm are as perfect as sanitary science can make them, and each bottle of milk supplied will be marked with the day and hour of milking. The product will be submitted to a bacteriological examination every two weeks and the cows will be inspected every month by Dr. John Wende, V. S.

The physicians referred to have no pecuniary interest whatever in the undertaking, their sole purpose being to procure for their patients, and for the public generally, the proper kind of milk food.

Orders for certified milk may be left with Mr. C. W. Boyce, grocer, corner of Main and Allen streets.

THE New York board of health, it is alleged, (*Buffalo Morning Express*, March 16, 1896,) is the first body of that kind to attempt to apply the theory of the cathode rays to the killing of the bacilli of certain diseases. During that week Dr. Herman Biggs and Dr. A. L. Beebe of the bacteriological department, and Dr. E. W. Martin, the chief inspector of the food division, conducted a series of experiments in this new field of research. Last week the necessary apparatus for producing the rays, consisting of a Crooke's tube and a Ruhmkorff coil, was set up in the chemical laboratory of the board. As a sort of preliminary investigation, the bacilli of diphtheria were exposed to the rays for an hour and a half, and afterward were returned to the incubator for the purpose of observing the effect. On examination, it was found that the bacilli showed signs of growth, and that, consequently, the bacilli were not harmed by the new light. It was explained, however, that the experiment was a very rough and crude one, and that too much significance should not be attached to it. The general theory of the killing of bacilli in this way is based upon the fact that too much light is fatal. It is reasoned that the extreme light of the cathode rays ought to be especially destructive.

There are bacilli, not to say parasites, that are affecting the body politic that are also afraid of the effect of extreme light—even the broad sunlight of publicity—as Mr. Henry Watterson so graphically pointed out some years ago.

A NUMBER of clergymen in New York City, at a recent meeting, adopted a resolution appealing to the members of their respective

congregations to relieve them from the attendance at cemeteries after performing the usual funeral rites. They allege, and with much reason, that after a long ride and exposure to all sorts of weather they are liable to contract pneumonia and other diseases, which may be prevented if the funeral ceremonies are completed at the church, house or other appropriately appointed place. The following extract from the appeal presents the subject in a very considerate and conservative light:

We might question the whole matter of interment services, on the ground of their extreme trial to the feelings and, in our climate, their danger to the health of those who attend them. For fully one-half the year the severities of our climate make the exposures they involve perilous to the witnesses and to the clergymen alike. The voice of the medical fraternity has repeatedly been raised against them, and there are not a few in every church who bear in memory some fatal illness whose seeds were sown at the interment of some friend. It seems at once useless and wrong to make the respect we would show the dead put the living in danger.

For a long time we have been of the opinion that some reform should be inaugurated in this matter. The appeal very appropriately affirms that it is useless and wrong to pay respect to the dead that in any manner places the life or health of the living in jeopardy.

The friends of medical education were pleased to learn through these columns last month that the so-called Stanchfield bill, introduced in the legislature in the interests of those opposed to the present methods of medical education, had received such opposition as to practically arrest its further progress. They were equally pleased to learn through the newspaper press that the bill introduced by the Hon. Mr. Nussbaum, of Albany, had passed the senate and would probably meet no opposition in the assembly. Later, however, they were dismayed to learn that Mr. Edward Lauterbach, Mr. Platt's chairman of the republican county committee in New York City, had held up the Nussbaum bill in the assembly. He has been employed by those opposed to the measure, who are in reality the proponents of the Stanchfield bill, to prevent its passage.

Here surely is a nice state of affairs, for it is not difficult to discern in it a Platt-Tammany combination to prevent reform measures relating to medical education from passing the legislature. The enlightened medical profession, without regard to

political preferences, will not be slow to resent the insult that has been so ruthlessly put upon it. It is just possible that this combination of all that is depraved in politics will soon witness the verification of the proverb that "whom the gods would destroy they first make mad."

LATER.—It is pleasant to inform our readers, however, that in spite of the action of Mr. Lauterbach, the Nussbaum bill was passed by the assembly March 20th, and that Governor Morton signed it on the 21st, so that it is now safely engrossed on the statute book. Among other things it prescribes a four years' course after January, 1898.

FRENCH physicians (*Lehigh Valley Medical Magazine*) are complaining, first, that there are too few foreign medical students coming to her hospitals for instructions and, secondly, far too many foreign physicians, many of them elderly, are practising medicine in their country. One of their medical societies recently discussed the dual question of how to increase the number of foreign students and decrease the number of foreign practitioners of medicine.

Personal.

DR. JOHN C. FISHER, late of Warsaw and physician-in-charge of the Warsaw Salt Baths and Sanitarium, has removed to California and, we understand, will assume relations with a sanatorium near San Francisco. Dr. Fisher is a qualified physician, ethical in his methods and every way competent to assume such place in the profession as he may choose. His career in the United States Marine Hospital service was an honorable one, and his resignation was accepted with regret by the supervising surgeon-general. We commend Dr. Fisher to the confidence of the medical profession of the Pacific coast.

DR. CHARLES A. L. REED, of Cincinnati, has been appointed by Governor Bushnell a member of the Ohio state board of medical registration and examination. Dr. Reed's appointment is an indication that the new board will be expected to do good work. It is difficult to see how it could have been possible for Governor Bushnell to have made a better appointment.

Dr. John Young Brown, Jr., formerly of Louisville and late first assistant physician in the Central Kentucky Asylum for the Insane, has removed to St. Louis. His office is at 507 North Spring avenue, and his hours are from 11 A. M. to 1 P. M. Dr. Brown will be certain to take a high position in the ranks of the medical profession of St. Louis.

Dr. Edward Clark, of Buffalo, has taken offices at the La Salle, 180 West Chippewa street, corner of Georgia street. Dr. Clark will continue to devote his attention to the treatment of diseases of the rectum. Hours: 11 A. M. to 2 P. M.

Dr. A. L. Benedict, of Buffalo, has been appointed associate editor of the *Philadelphia Medical and Surgical Reporter*. In additional to editorial work he will prepare the review of foreign progress in digestive diseases.

Dr. Frederick J. Mann, late of Watertown, N. Y., has been appointed assistant physician at the Hudson River State Hospital, Poughkeepsie, N. Y., and has entered upon the duties of his office.

Dr. Lillian C. Randall, of Buffalo, physician-in-charge of the Riverside Hospital, has removed her private office and residence from 41 Otis place to 502 Elmwood avenue.

Dr. Benjamin F. Griffith, of Springfield, Ill., has been elected recently president of the Illinois state board of health.

Obituary.

Dr. Hiram Corson, of Plymouth Meeting, Pa., died at his residence March 4, 1896, at the advanced age of 92 years. He was said to be the oldest physician engaged in practice in the United States, and a remarkable fact connected with his history is, that he was born at Plymouth Meeting where he lived and practised during his entire lifetime. In speaking of his death, the *Lehigh Valley Medical Magazine* says that Dr. Corson was a man of skill, of probity, a defender of principle, a sustainer of all true associated effort for the profession of medicine.

Dr. Corson was an honorary member of the Harrisburg (Pa.) Pathological Society; associate member of the Philadelphia Obstetrical Society; associate fellow of the College of Physicians of Philadelphia, and permanent member (president, 1852,) of the Pennsylvania Medical Society and of the American Medical Association, and an honorary fellow of the American Association of Obstetricians and Gynecologists.

Society Meetings.

THE International Periodic Congress of Gynecology and Obstetrics will hold its second session at Geneva, Switzerland, during the first week in September, 1896. The official program announces the following subjects for discussion:

In gynecology, (1) Treatment of pelvic suppurations. (2) Surgical treatment of uterine retrodeviations. (3) Which method of suturing the abdomen affords the best guarantee against abscess and hernia?

In obstetrics, (1) Relative frequency and most common forms of pelvic contraction in different races, groups of countries or continents. (2) Treatment of eclampsia.

The subscription to the congress is 30 francs, or $6.00. The secretary for obstetrics is Dr. A. Cordes, of Geneva, and for gynecology, Dr. Betrix, also of Geneva. The American secretary is Dr. F. Henrotin, of Chicago.

THE American Medical Publishers' Association will hold its third annual meeting at Atlanta, Ga., Monday, May 4, 1896. A number of new and important topics have been suggested for discussion, and the program will include papers from experienced publishers. Members and others desiring to contribute papers will be furnished valuable information upon communicating with the secretary, Charles Wood Fassett, St. Joseph, Mo. A special invitation has been extended to the association to visit "Lookout Inn," Chattanooga, en route to Atlanta, where entertainment will be provided by the manager, Mr. M. S. Gibson. The association is requested to rendezvous at Chattanooga, Saturday, May 2, 1896.

THE National Confederation of State Medical Examining and Licensing Boards will hold its sixth annual meeting at the Hotel

Aragon, Atlanta, Monday, May 4, 1896, beginning at 10 o'clock A. M., under the presidency of Dr. William Warren Potter of Buffalo. An interesting program has been prepared (see page 735), in which among other things it is announced that James Russell Parsons, Jr., Esq., director of examinations of the University of the State of New York, will deliver an address. All physicians and educators friendly to the cause of higher medical education are cordially invited to attend this meeting.

THE Tri-State Medical Society will hold its annual meeting at Chicago, April 7, 8 and 9, 1896. The program announces, among other things, that Dr. John B. Murphy, of Chicago, will hold a surgical clinic and that Dr. Joseph M. Mathews, of Louisville, will deliver the public address, subject—Some suggestions in regard to reforms in the medical profession. Papers will be read, among others, by the following-named: Dr. A. H. Cordier, Kansas City; Dr. L. H. Dunning, Indianapolis, Dr. Roswell Park, of Buffalo; Dr. D. S. Reynolds, of Louisville, and Dr. Joseph B. Bacon, of Chicago.

THE American Public Health Association, composed of distinguished hygienists and sanitarians, will hold its next annual meeting in Buffalo during September, 1896. The president is Dr. Eduardo Liceaga, of Mexico, who has written to Dr. Ernest Wende, the local member of the executive committee, that he expects to bring a numerous delegation of his countrymen to attend the congress. The citizens of Buffalo should unite in an endeavor to make this a most superior meeting of the association.

THE American Academy of Medicine will hold its twenty-first annual meeting at the Hotel Aragon, Atlanta, on Saturday, May 2, and Monday, May 4, 1896, under the presidency of Dr. Henry M. Hurd, of Baltimore. That portion of the program relating to methods of medical teaching is published in another place, page 736, in this issue. The secretary, Dr. Charles McIntire, Easton, Pa., has prepared an elaborate program, and an interesting meeting is expected.

THE Third International Congress of Dermatology will be held in London, August 4–8, 1896. It is considered of the greatest importance that those intending to join the congress should notify

the secretary, Dr. J. J. Pringle, 23 Lower Seymour street, London, W., of their intention soon as possible. The membership fee is $5. Dr. George Thomas Jackson, of New York, is the secretary for the United States.

THE Iowa State Medical Society will hold its forty-fifth annual meeting at Des Moines, April 15, 16 and 17, 1896, under the presidency of Dr. Davis S. Fairchild, of Clinton. The secretary, Dr. James W. Cokenower, of Des Moines, has issued an elaborate program that indicates a high grade of professional activity in Iowa.

Medical College and Hospital Notes.

THE directors of the Post-Graduate Medical School and Hospital have named one of their wards in memory of the late Dr. Charles Carroll Lee, who was for many years a professor in the institution. They have placed a tablet in the ward, giving the names of those who combined to contribute the $10,000 which was given for the purpose of the memorial. These names are as follows: Dr. Robert Abbe, Dr. L. Bolton Bangs, Mrs. James Beales, Dr. Stephen S. Burt, Miss Caldwell, Dr. Charles L. Dana, Dr. Bache McE. Emmet, Dr. George H. Fox, "A Friend," Dr. Horace T. Hanks, Mr. and Mrs. Eugene Kelly, Mr. and Mrs. Henry J. Lamarche, Dr. Daniel Lewis, Mr. and Mrs. William Lummis, Mr. and Mrs. Frank A. Otis, Dr. Clarence C. Rice, Mr. Eli K. Robinson, Mr. Nelson Robinson, Dr. D. B. St. John Roosa, Mrs. Eliza M. Sloan, Dr. Andrew H. Smith, Mrs. M. E. Sparks and Dr. Reynold W. Wilcox. It will be seen that the faculty of the institution participated largely in the memorial gift.

THE Buffalo Hospital of the Sisters of Charity will formally open the new wing that has recently been constructed, on Saturday, April 11, 1896. A reception will be held, lasting from 3 to 9 P. M., at which a committee of women, belonging to the St. Elizabeth Hospital Association, will receive the guests. Refreshments will be served and the new building will be open to visitors during the next day, Sunday, April 12th. A number of people have promised to furnish private rooms, among whom is Mrs. Edwin G. S. Miller. There are still a number of private rooms and ward beds to be

furnished, and the managers hope that all who have promised will fulfil in time for the opening.

THE Riverside Hospital, of Buffalo, has issued a very tasteful circular, announcing that it is conducted for the medical and surgical treatment of men, women and children. It was established by Dr. Lillian Craig Randall, who is the physician in charge. Dr. Randall is aided by a staff of prominent attending and consulting physicians.

A training class for nurses is established in connection with the hospital, where pupils are received from May 1st. Further particulars may be obtained by addressing Dr. Lillian Craig Randall, 327 Breckenridge street, Buffalo.

THE faculty of the medical department of the University of Buffalo has issued a circular, inviting the profession to a series of lectures on comparative pathology by Dr. Woods Hutchinson, who has long given attention to the subject. The course began on Tuesday, March 17, and will close on Thursday, April 2, 1896. The lectures are given at 5 o'clock P. M., in Alumni Hall, at the University building.

OFFICIAL.—The medical department of the University of Buffalo makes the official announcement to the profession and to students of medicine that it has adopted a four years' course, beginning with the session of 1896–'97. All matriculants after March 5, 1896, will be required to comply with this regulation.

Book Reviews.

DIPHTHERIA AND ITS ASSOCIATES. By LENNOX BROWNE, F. R. C. S., Ed., Senior Surgeon to the Central London Throat, Nose and Ear Hospital; late President of the British Laryngological Association; Corresponding Fellow of the American Laryngological Association; Author of The Throat and Nose, and their Diseases, etc., etc. Illustrated by the author. Pp. xii.—272. Price, $5. London: Balliere, Tindall & Cox. Philadelphia: J. B. Lippincott Company. 1895.

Among the many new and valuable books that have appeared recently, there is none that can be said to be more thoroughly up-to-date than the one before us. Nearly all medical monographs

are written either from the standpoint of the clinician or of the scientist. Hence, it results that either the clinical observations lack the confirmation of the experimentalist, or the deductions made in the laboratory are not corroborated by clinical application. In no work that has come to our notice of late has this most desirable combination of scientific deduction and clinical application been so fully, ably and clearly made, as in this treatise. The title of the book is a most happy one. It at once gives the reader a clue to the fact that there are forms of mucous inflammation, characterised by a pseudo-membranous formation and caused by micro-organisms other than those of a diphtheritic character.

This essay, the author states, is based mainly on a course of lectures recently delivered for the purpose of establishing a landmark at an important era in the history of diphtheria, and of emphasising the desirability of assimilating the teachings of bacteriology to the purposes of practical medicine. Mr. Browne has incorporated in his book many original and valuable observations made by himself and recorded in his writings at various times, to which he has added the present teachings of practical bacteriology.

As is quite characteristic of Mr. Browne, the subject is treated in a very careful and systematic manner. He first deals with the history of diphtheria; then he treats of its etiology, pathology, the bacteriological diagnosis of diphtheria and its associates; the clinical diagnosis, record of illustrative cases of diphtheria and its associates; prognosis, treatment—both remedial and operative—laryngo-tracheal diphtheria, croup, and the hygiene and prophylaxis of diphtheria. In addition to these chapters he gives formulæ for remedies and an appendix on the serum treatment of diphtheria.

In his brief résumé of the history of diphtheria, the author takes occasion to pay a just tribute to Sir Morell Mackenzie and the other writers on this subject who have enriched our knowledge of this disease, notwithstanding the fact that its specific cause, the Klebs-Loeffler bacillus, was unknown to them. It was his characteristic rare acumen that led Mackenzie to assert the unity of croup and diphtheria, which bacteriological research finally corroborated. The discovery of the specific organism by Klebs in 1883, and the establishing of the causal relationship of this organism to diphtheria, in 1884, by Loeffler, by making pure cultures and inoculating guinea-pigs and other animals with the disease, marks the crowning epoch in its study and history.

"Logically," the author says, "the etiology of diphtheria might be comprised in a description of its specific organism, with its local manifestations and its systemic effects, and such has been the course pursued by those who are commonly described as scientists." This, however, is to be regarded only as the exciting cause, whereas the study of the predisposing causes, those that favor the development of the germ, is of no less importance. It is this

cause that accounts for the mortality of the disease, which is three times greater in rural districts than in urban. The greater mortality of the disease in badly-drained, unsanitary dwellings; in dwellings in close proximity to stables, cess-pools, and the like; in regions of excessive soil-moisture, and the fact that the disease is more prevalent during the seasons of the year that are cold and damp, are owing to the same cause.

Not only does germ infection take place from external sources, but systemic conditions may equally favor the development of germs. This fact, which is often overlooked by writers on this subject, has here, we are happy to say, due prominence. The importance of proper attention to conditions of the nose and throat that necessitate mouth-breathing and that also afford a most excellent culture medium, cannot be overestimated. Such conditions are found mainly in adenoid vegetations or enlarged tonsils. The tonsils, which Virchow so aptly terms "open wounds," owing to their frequently diseased condition, are the parts in which the diphtheritic bacillus most frequently gains foothold. Mr. Browne properly and most forcibly calls attention to the removal of these diseased conditions as a prophylactic. Of 1,000 cases tabulated by him, the exudate was reported to be limited to the tonsillar region in 666 cases. In eight only of the 1,000 were the tonsils not implicated with some other part. It is, he says, doubtless owing to the greater prevalence of these conditions in children that diphtheria is so much more frequently contracted by them than by adults. The greater frequency of the disease and the greater mortality among children in sparsely settled districts are also, doubtless, owing to the fact that diseased tonsils and adenoid growths receive less attention in such regions than in towns and cities. As to the inoculability, contagion and dissemination of diphtheria, it is now clearly to be seen that such may take place in any manner in which the germ of the disease can be carried. It may be communicated through direct contamination of articles of food and drink, carried in wearing apparel, or derived through any source by which the bacilli can be imparted from one person to another.

After describing very clearly the characteristic appearance and behavior of the Klebs-Loeffler bacillus, the author discusses the associated microörganisms, which are frequently the cause of membranous exudates, and which so closely resemble that caused by the specific organism as to be mistaken for it. This differentiation in the characteristics of these various membranous formations of the throat was, it should be remembered, recognised by expert observers long before the *raison d'etre* was demonstrated by the microscopist, and "membranous sore throat," "diphtheroid sore throat," "croupous sore throat" and the like, were familiar terms employed to designate these respective conditions. Those germs most frequently found in this connection are mainly cocci, as diplococci, staphylococci and streptococci. When these are found

independent of the bacillus, a much less serious disturbance is indicated than when associated with it. The virulence of the diphtheritic bacillus is also enhanced or diminished by the kind and degree of intermingling of these organisms.

The author then proceeds to describe a bacillus which, in its method of growth, the formation of colonies and its microscopical appearance, is absolutely identical with the Klebs-Loeffler bacillus. This bacillus is termed the "pseudo-diphtheria" bacillus. It is this bacillus which is often found in the throats of convalescent patients, but incapable of producing diphtheria, because no culture can be obtained from it. It is thus readily seen that patients may be quarantined by our health inspectors when this bacillus only is found in the throat and is mistaken for the diphtheritic bacillus. In such cases the question should invariably be settled by the culture test of the bacteriologist.

The discussion of the pathology of the disease seems to be somewhat meager in proportion to the extent of the pathological changes, both local and general, that take place. This is compensated, however, in a great measure, by the chapters on etiology, which discuss the toxic products of the diphtheria bacillus and its associates and the action of the toxines on the system, and by the chapters on prognosis, since these portions of the book describe most accurately the toxic effects of the products of the bacillus, the tox-albuminoids. In the chapter on bacteriological diagnosis we have an admirable description of the various methods employed by bacteriologists in conducting manipulations in connection with staining, the employment of the various culture-mediums, and experiments on animals.

The various subjective and objective phenomena, upon which we were accustomed to rely before the microscope came to our aid, are clearly stated in the discussion on clinical diagnosis. Notwithstanding the great facility with which we are enabled to arrive at a positive diagnosis by the aid of the microscope, we should nevertheless be so familiar with the subjective and objective phenomena as to be comparatively independent of the microscope in cases where it is not at our command.

The chapter in which a record of illustrative cases of diphtheria and its associates is given is well worthy of study. A record of twenty-four cases is given, divided into twelve classes. For each class typical cases are selected to illustrate the pathological process produced by the different organisms, some separately and others intermingled in different proportions. Together with the clinical history of each case are given colored drawings of the appearance of the throat and a microphotograph of the bacillus or bacilli present, which are especially instructive and helpful in studying the disease.

In the prognosis of diphtheria it is shown that we must take into consideration the history and surroundings of the patient, the complications of vital functions during the course of the dis-

ease, the sequelæ and the result of the bacteriological examination. Aside from the two general conditions on which reliance is placed in forming a prognosis—namely, the general condition of the patient and the virulence and extent of the disease,—we can rely very largely on the bacteriological examination.

In discussing the treatment found most effective in cases of diphtheria, Mr. Browne says:

> It cannot but be gratifying to the clinician that all the advancement in scientific knowledge of the etiology of the disease which we have so gratefully recorded, has but confirmed the wisdom of the internal treatment pursued in this country" [and we might add in the United States also] "for the last forty years; albeit it has been prescribed on what the new school may consider unscientific and empirical grounds. Iron and chlorate of potash or soda still present the sheet-anchor of our constitutional treatment of diphtheria.

The use of mercury is not regarded with great favor by the author. The most excellent results obtained from the use of calomel by some of our leading men in this country, and the powerfully antiseptic and germ-destroying properties of the bichloride solution, used locally, causes us to take a little more favorable stand in regard to mercury than does the author. We quite agree with the writer as to the advisability of administering strychnine in large doses to prevent cardiac depression, and also as to the value of alcohol in large doses, which was so strongly advocated by Chapman a few years ago.

Among the various agents used as solvents of the membrane and also as antiseptics, lactic acid is given decided preference over other agents, as lime water, perchloride of iron, carbolic acid, sulphur, sulphurous acid or sulphites, resorcine, caustics, astringents, or alkaline solutions, chloric acid and peroxide of hydrogen. He says: "We have been so well satisfied with lactic acid that we have been loth to try any other remedy. . . . . Its action appears to be limited almost solely to unhealthy tissue, promoting its disintegration by a process analogous to that of digestion." In opposition to the opinion of many writers, Mr. Browne advises, in the application of the acid with a swab, the use of sufficient friction to remove the membrane so as to reach the parts in which there is the most microbal activity.

Gargles are very justly condemned as being ineffective, not reaching the diseased part, unless used by the Von Trœlsch method, but as this requires much practice in order to avoid swallowing the solution, it is entirely impractical with children. It requires the patient to rise from the recumbent position in bed, which might be dangerous in case of weak heart; also, it throws the muscles of the throat into irregular activity, and may, therefore, in a measure favor palatal and faucial paresis. The author advises, however, syringing the throat with a chlorine wash, or a solution of biniodide of mercury or of boric acid, as far more efficient after the removal of the membrane.

The same general plan of treatment holds good when the disease extends to or involves the nares or post-nasal space. Mr. Browne very properly urges the importance of maintaining respiration through the nares by the removal of the membrane, and also by the early incising of the membrana tympani when abscess of the middle ear occurs from the extension of the disease through the Eustachian tube. Among the operations that he wisely advocates, and which he says he has performed for seventeen years, are the removal of enlarged tonsils, of thickened and elongated uvulæ and of adenoid growths, when these parts become so swollen with disease as to be serious impediments to respiration. Such operations are condemned by many because of the exposure of a raw surface to infection. If this were so, it would still have to be admitted that such exposure is far less dangerous than interference with respiration. In the case of tonsils permeated with germs, excision leaves a much less fertile medium of incubation, and, as the author points out, if the disease is confined to the tonsils the affected part is thereby removed.

With regard to the question of croup, as differentiated from laryngo-tracheal diphtheria, we think here an unwarranted distinction is maintained. When we consider that the standard definition of croup is "a disease, generally of infants, characterised by inflammation, with fibrous exudation of the larynx and trachea," and when we remember that this fibrous exudation is, as the writer shows, produced by a germ and by the same germ that caused fibrous exudation in the fauces, we cannot believe there is sufficient reason for calling the disease *croup* when located in the larynx and trachea, and *diphtheria* when located in the fauces, even for the purpose of conforming to the customs of continental observers, as the author proposes.

There is another question that might be raised at this point. It is in regard to the author's terms "non-bacillary croup" and "non-bacillary diphtheria." As it is recognised that the appearance of the Klebs-Lœffler bacillus is the unfailing characteristic that differentiates diphtheria from other forms of mucous inflammation, would it not be more scientific to regard all cases in which the Klebs-Lœffler bacillus appears as diphtheria? We would thus be enabled to reserve the term "croupous inflammation" for those forms of mucous inflammation attended with an exudate produced by the different varieties of cocci, whether in the larynx, trachea or fauces. Clinically speaking, this distinction cannot be made without the aid of the microscope in expert hands. In the treatment of these conditions, therefore, until such distinction can be positively made microscopically, the safest rule to follow would be to regard the case as diphtheria until proved to be something else.

In the treatment of laryngo-tracheal diphtheria, Mr. Browne finds the traditional emetic of signal service, and likewise uses to advantage the Leiter coil for applying dry cold to the neck by passing ice-water through the coil. He also advocates the use of

steam impregnated with pinol, and, in cases of spasm, with benzoin and chloroform. The use of vapor mixed with carbolic acid he also employs, but that obtained from slaking lime, which is so much employed and regarded as a special solvent of the membrane, he does not mention.

The two principal operative measures for relief of impending suffocation are intubation and tracheotomy. The question as to which operation should be chosen can, as the author points out, very often be decided with the laryngeal mirror. If the membrane is scanty and the swellings and obstructions are above the glottis, intubation is called for. If there is much membrane in the lower part of the larynx and in the trachea, tracheotomy is indicated. It would seem, however, that in England, as on the continent, tracheotomy is warmly advocated, and in many cases given the preference to intubation; whereas, in this country in many of the same cases the latter operation would be preferred. During his visit to this country in 1887, Mr. Browne states that he had an opportunity of seeing some of Dr. Waxham's cases, and says: "We have since had some encouraging experiences with the operation in our own practice, and we are bound to confess that many former objections, which we entertained, have been almost entirely dissipated." The superiority of intubation over tracheotomy in young children and the importance of avoiding a cutting operation are points that urgently commend it to the author; whereas, the difficulties of feeding and the great skill required in removing and cleaning the tube when obstructed, are points in favor of tracheotomy. One of the most forcible arguments against tracheotomy and one that should, we think, lead us to avoid it if possible, is the sequelæ that so often arise from the incision of the trachea. Many cases of sudden death are reported in children and in older persons who have previously undergone the operation of tracheotomy. These sudden deaths were due undoubtedly to cicatrices or growths in the interior of the trachea. It was a noticeable fact during our late war that volunteers very rarely presented themselves for examination who had undergone the operation of tracheotomy. Considering the large number of men that entered the army, and the frequency with which the operation had been done for years, this is most significant. The preventive measures to be observed with respect to the hygiene and prophylaxis of diphtheria are clearly and fully discussed. They are such as are of generally recognised importance to prevent the spread and propagation of the disease.

The value of the book is increased by the addition of a number of formulæ which the author has found of special service in the treatment of diphtheria, and they will doubtless prove equally useful to others.

As an appendix the author discusses the subject of the serum treatment of diphtheria. He details very clearly and concisely the history of the researches that led to its adoption, and also its

theory of action and its method of production. Mr. Browne makes his deductions as to the value of this mode of treatment from a series of 200 cases treated in the wards of the Metropolitan Fever Hospital, in which he was able to follow the course of treatment of the cases. In 100 of these cases the serum treatment was used, and in the other 100, old and well-established methods were employed. The actual mortality in both series of cases was the same—namely, twenty-seven. In the cases under treatment the complications that arose, such as skin eruptions, affection of the joints, adenitis, renal complications—as albuminaria, anuria and nephritis—were more frequent in the cases in which the serum treatment was employed than in those treated by the classical methods. Notwithstanding the large number of reported cases in which this method has been adopted and has, according to other statistics, reduced the percentages of deaths from one-third to one-fourth of the total number of cases, it is readily seen that Mr. Browne is not favorably disposed toward the serum treatment. With his opinion some able and experienced observers in this country concur, although the great preponderance of evidence thus far is in its favor. The author regards the treatment as still on trial, and he "deprecates the acceptance of the serum treatment of diphtheria with that almost blind enthusiasm which was accorded to Koch's remedy on the high reputation of its author."

In conclusion, we cannot but congratulate Mr. Browne upon presenting the clearest and most concise brochure that has appeared upon the subject since Sir Morell Mackenzie's classic monograph, and commend it for careful study to those desirous of obtaining a full and accurate knowledge of the present relation of medical science to the etiology and treatment of diphtheria. The work is profusely and admirably illustrated by the author's own drawings, many of which have been most beautifully reproduced in color. The microphotographs of the bacilli, placed side by side with the drawings illustrating the macroscopic appearance of the fauces, are most excellent. The typographical execution of the book is all that could be desired. J. O. R.

MANUAL OF GYNECOLOGY. By HENRY T. BYFORD, Professor of Gynecology and Clinical Gynecology in the College of Physicians and Surgeons of Chicago; Professor of Clinical Gynecology in the Woman's Medical School of Northwestern University; Professor of Gynecology in the Post-Graduate Medical School of Chicago. Octavo, pp. xii.—488, containing 234 illustrations, many of which are original. Price, $2.50. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1895.

This book has been written by an author of experience and cannot fail to prove instructive to the student. We are among those who believe that the teaching of gynecology need not commence until the student's final year and then should be largely clinical. In this statement, too, we are presuming upon a four years' course.

Byford has separated the practical from the technical by the use of different kinds of type, a plan which we commend. On page 19 are seven drawings of postures made from original photographs taken by the writer and published in the Transactions of the American Association of Obstetricians and Gynecologists, Volume V., 1892. Credit to the original source, however, is omitted, which we presume is an oversight.

We think it would have been better if Byford had prepared his manual exclusively for students, and thus kept it within the range of elementary gynecology. However, we still regard it as one of the best manuals published and commend it to the favor of students.

PHYSICIANS AND SURGEONS OF AMERICA. A Collection of Biographical Sketches of the Regular Medical Profession. Edited and Compiled by IRVING A. WATSON, A. M., M. D., Secretary American Public Health Association, etc. Imperial 8vo, pp. 843. Illustrated. Concord, N. H. Republican Press Association. 1896.

This long-expected volume has at last appeared. It has been announced several times, but of necessity there is unavoidable delay in the issuance of such a book. It will be doubly welcome to the medical profession, because, first, it is one of the most complete of its kind; and second, the editor has excluded sketches of irregular practisers of medicine.

There are several points of excellence to be commended in this volume. In the first place, the biographies are accompanied by excellent half-tone pictures. It is quite important to know how a man looks when reading his own contributions to medical literature, or when writing sketches of his work for publication in medical journals. Again, the biographies are for the most part extremely accurate, being confined to chronological data and are devoid of fulsome praise.

The general plan of the work is exceedingly good and its mechanical execution is without fault or blemish. It is printed on number one book paper, and is bound in a substantial as well as tasteful manner. It is to be regretted, however, that many men whose biographies ought to be here included have declined or failed to furnish them. We can understand the feeling that has prompted many to this course. Most self-respecting physicians dislike to have their photographs and biographies published alongside of even regular physicians whose methods are questionable, to say nothing of irregulars and quacks. A second edition of this volume will, no doubt, contain very many additional names and pictures, for it will soon be discovered that objectionable features have been scrupulously excluded.

This book will prove of vast assistance to medical editors as well as to newspaper men in general, and ought to be placed on the shelves of every public library. The editor is to be congratulated upon the completion of such a great labor in so satisfactory a manner.

PREGNANCY, LABOR AND THE PUERPERAL STATE. By EGBERT H. GRANDIN, M. D., Consulting Surgeon to the New York Maternity Hospital; Consulting Gynecologist to the French Hospital, New York, etc.; and GEORGE W. JARMAN, M. D., Obstetric Surgeon to the New York Maternity Hospital; Gynecologist to the Cancer Hospital, New York, etc. Illustrated, with forty-one (41) original full-page photographic plates from nature. Royal 8vo, pp. viii.—261. Cloth, $2.50 net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry street. 1895.

This work differs from any yet issued pertaining to the practice of obstetrics. It is a monograph made up largely of clinical facts which have been demonstrated by the authors—one or both. We believe it will serve to improve the teaching of the obstetric art to have such works as this adopted as a guide.

The book is divided into three parts, as indicated by its title, the first of which, pregnancy, is dealt with in three chapters. Chapter I. considers the diagnosis, differential diagnosis, duration and hygiene of pregnancy; Chapter II., the pathology of pregnancy; Chapter III., the diagnosis of the presentation and the position of the fetus.

The second section treats of labor in four chapters: Chapter I., considering the mechanism of labor; Chapter II., its clinical course; Chapter III., the management of normal and abnormal labor and Chapter IV., the care of the newborn infant.

The third section considers the puerperal state in two chapters, the first treating of the normal puerperium and the second of the pathological puerperium. In the latter chapter we are pleased to note the following: "The term, puerperal fever, may still suffice for the laity. It can have but one meaning for the physician, and this is septicemia, blood-poisoning, wound infection, the absorption of products of decomposition altered through infection into a virulent poison." When authors begin to teach facts in this way we are verily making progress.

The illustrations are among the best we have seen in an obstetrical treatise and are all original.

THE PATHOLOGY AND TREATMENT OF VENEREAL DISEASES. By ROBERT W. TAYLOR, A. M., M. D., Clinical Professor of Venereal Diseases in the College of Physicians and Surgeons, New York. In one octavo volume of 1,002 pages, with 230 engravings and seven colored plates. Cloth, $5.50; leather, $6.50. Philadelphia: Lea Brothers & Co., Publishers. 1895.

Within the past few years, many works have appeared upon diseases of the genito-urinary organs, the encyclopedia published under the direction of Pierce Morrow being the most important. We are now presented with another, The pathology and treatment of venereal diseases, by Dr. R. W. Taylor, of New York.

It is not too much to say, concerning this publication, that it is unsurpassed by any of its predecessors, both as regards contents and make-up. Nothing has been omitted and every subject is pre-

sented in a concise, lucid, logical manner that cannot fail to impress the student as well as practitioner.

The elimination of old or burdensome matter and an arrangement of facts up to date has been done in the most scholarly manner. Not only has the author given the result of his own experiences, which are enormous, but he has supplemented them by those of others that are worthy of inclusion.

No library should be without this excellent work, and if a selection was limited to but one, this one, it is believed, would be found the most satisfying. Dr. Taylor has added further distinction to himself and placed the profession under many obligations to him. E. W.

BOOKS RECEIVED.

Report of the Commissioner of Education for the year 1892-93. Volume II. Containing parts III. and IV. Washington: Government Printing Office. 1895.

Twenty-first Annual report of the State Board of Health of Michigan, for the year ending June 30, 1893. Henry B. Baker, M. D., Secretary. Lansing: Robert Smith & Co., State Printers. 1895.

Transactions of the Seventeenth Annual meeting of the American Laryngological Association, held in the City of Rochester, N. Y., June 17, 18 and 19, 1895. Edited by Charles H. Knight, M. D., Secretary. New York: D. Appleton & Co. 1896.

A Text-book upon the Pathogenic Bacteria for Students of Medicine and Physicians. By Joseph McFarland, M. D., Demonstrator of Pathological Histology and Lecturer on Bacteriology in the Medical Department of the University of Pennsylvania; Pathologist to the Rush Hospital for Consumption and Allied Diseases. Octavo, pp. 359. With 113 illustrations. Price, $2.50 net. Philadelphia: W. B. Saunders, 925 Walnut street. 1896.

Infantile Mortality during Childbirth and its Prevention. By A. Brothers, B. S., M. D., Visiting Gynecologist to Beth Israel Hospital, New York; Attending Gynecologist to the New York Clinic for Diseases of Women; Instructor in Operative Gynecology at the New York Post-Graduate Medical School and Hospital, etc. Octavo, pp. viii.—179. Price, $1.50. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1896.

Transactions of the American Microscopical Society. Eighteenth Annual meeting, held at Cornell University, Ithaca, N. Y., August 21, 22 and 23, 1895. Edited by William C. Krauss, M. D., Secretary, Buffalo, N. Y. Price, $2.50. The Wenborne-Sumner Co., Printers. 1896.

New Truths in Ophthalmology as developed by G. C. Savage, M. D., Professor of Ophthalmology in the Medical Department of the Vanderbilt University, etc. Pp. viii.—270. With fifty-eight illustrations. Third edition. Nashville, Tenn., 1896.

A Treatise on the Diseases of Infancy and Childhood. By J. Lewis Smith, M. D., Clinical Professor of Diseases of Children in the Bellevue Hospital Medical College, New York. New, eighth edition, thoroughly

revised and rewritten and much enlarged. Handsome octavo of 983 pages, with 273 illustrations and four full-page plates. Cloth, $4.50; leather, $5.50. New York and Philadelphia: Lea Brothers & Co., Publishers. 1896.

The Toxic Amblyopias: their Symptoms, Pathology and Treatment. By George E. De Schweinitz, M. D., Clinical Professor of Ophthalmology, Jefferson Medical College, of Philadelphia. Octavo 240 pages, forty-one engravings and nine full-page colored plates. Limited edition. De luxe binding, $4.00. net. New York and Philadelphia: Lea Brothers & Co., Publishers. 1896.

Electricity in Electro-Therapeutics. By Edwin J. Houston, Ph. D., and A. E. Kennelly, Sc. D. Cloth, 412 pages, 128 illustrations. Price, $1.00. New York: The W. J. Johnston Co., Publishers, 253 Broadway.

Literary Notes.

LAYS ON RAYS.

BY WILLIAM JAMES EVANS.

Turn on the Röntgen ray,
Let darkness have its day,
Crooke's tubes have come to stay,
Light shines the other way.

Let wit see through the dense
Old wooden door of sense,
With vision so intense
The field is quite immense.

When we've appendix fright
Can we then use the light,
And, finding it all right,
Not operate that night?

If the electric eye
Can see through wet and dry,
Inside both you and I,
What charms can it descry?

Will it heal the unsound,
And bring the sick around,
Make happiness abound,
And let those smile who frowned?

We'll pay our doctors' bills,
And put him in our wills,
If it bacilli kills
And cures our other ills.

Can we see who are right
With this new Röntgen light?
Will it help mental sight
To put the false to flight?

May it not see behind
Your eye into your mind,
And show what you're inclined,
To think no one can find?

It sees straight through a book,
It shames—the critics' look;
What you can't find by hook
Just radiograph by Crooke.

We hear a thousand miles,
And see through our profiles,
And now electric trials
Taste, smell and touch beguiles.

THE *Buffalo Sunday News*, of March 15, 1896, gives a clever review of a series of articles published in the March issue of the *American Journal of Medical Sciences* on the Röntgen X rays.

The *News* reproduces twelve illustrations from the journal mentioned and has done altogether the most scientific work on the new photography that we have seen in any newspaper.

WEIR'S index to the medical press is announced for issue about April 15, 1896. The object of this publication is to index the literature in the medical journals of the United States and Canada for the month previous, including also the published transactions of the various national and state medical societies. Although the "index" proper will deal strictly with the American medical press, British and European journals will be similarly reviewed in a voluminous appendix. Further, it is the intention of the management to list, under each department, recently-published text-books on the general subject, so that each issue may be, as nearly as possible, a complete bibliography of current medical literature. Subscribers to this journal may receive the initial number by addressing the publishers before April 15th, provided mention is made of the BUFFALO MEDICAL JOURNAL in the request. Address Frank Weir & Co., Publishers, 32 South street, New York.

A MAGAZINE'S INFLUENCE.—The enormous circulation of such a magazine as *The Ladies' Home Journal* can, in a sense, be understood when it is said that during the last six months of 1895 there were printed, sold and circulated over 4,000,000 copies—in exact figures, 4,058,891. Figures such as these give one some idea of the influence which may be exerted by even a single one of the modern magazines.

The Ladies' Home Journal does not accept medical advertisements of any sort. Every regular physician should testify his appreciation of this unique position taken by the editor, Mr. Edward W. Bok, by becoming a subscriber to it.

THE *Scalpel*, a monthly journal of medicine and surgery, edited by Dr. Thomas M. Dolan, Halifax, has appeared. It is announced that it will be continued on the same lines as the *Provincial Medical Journal*, which for ten years has been so well known under the same editor.

THE *Journal of Mechanical Surgery*, edited by Dr. Edward A. Tracy, Boston, who modestly announces himself as a member of the American Medical Association, is the latest candidate for pro-

fessional favor. The object of this paper seems to be to advertise its editor.

THE *Canada Medical Record* announces a change in its management. It is now owned and edited by the faculty of medicine of the University of Bishop's College, Montreal. Dr. J. B. McConnell is the editor.

Miscellany.

THE Mellier Drug Company, of St. Louis, has issued a little brochure entitled Mellier's Galaxy of Eminent Medical Men, copies of which will be posted to any physician who will mention this journal in his request. A specimen of these portraits may be found on advertising page xiv. of this issue of the JOURNAL. The address of Mellier Drug Company is 2112 Lucas place, St. Louis.

ACKNOWLEDGMENT.—The University Medical College of Kansas City, Mo., held its annual commencement Thursday, March 19, 1896. The courtesy of an invitation to attend the ceremonies is gratefully acknowledged.

THE Charles Roome Parmele Company has removed from 98 William street to 36 Platt street, New York. The object of this change is to obtain more commodious accommodations for the growing business of this enterprising house.

CHARLES WOOD FASSETT, secretary of the American Medical Publishers' Association, has just issued a revised edition of the Medical Journal Exchange List, containing the names and addresses of all publications in the United States and Canada, devoted to medicine, surgery, pharmacy, hygiene, microscopy, and allied sciences. This list is printed upon adhesive paper, and is used extensively by publishers in mailing their exchanges, as well as by scientific writers in sending out reprints, etc. Price, $1.25 per dozen complete sheets. (Furnished free to members of the association.)

THE American Medical Association meets in Atlanta, Ga., May 5, 1896, and all delegates to this society should embrace the oppor-

tunity of visiting "Lookout Inn," a magnificent and historic spot on the crest of Lookout Mountain, overlooking Chattanooga, Tenn. A special invitation is extended to physicians to spend a week with us, en route to Atlanta, and a complimentary rate will be made for the occasion. Trains up the mountain make close connections in both the Central and Union Depots, Chattanooga, running through to the Inn without change. For further information and handsome, illustrated booklet, address M. S. Gibson, Lookout Mountain, Tennessee.

THE DR. L. CH. BOISLINIÉRE PRIZE ESSAY FUND.—At a general meeting of the medical profession of St. Louis, held on January 13, 1896, the undersigned were appointed a committee to determine upon and institute some suitable memorial in honor of our lamented and revered colleague, Dr. L. Ch. Boisliniére, and to solicit subscriptions from physicians and the public at large, in order to properly accomplish this object.

After mature deliberation and free discussion, both in and out of the committee, as to the shape this memorial should take, it has been determined to found a Boisliniére prize essay, on some subject connected with obstetrics and gynecology, the award to be made triennially and to be open to the competition of regular physicians residing in the United States.

The committee believes that a memorial of this nature will not only keep in perpetual remembrance the name of our honored friend, but also, in thus fostering medical science and encouraging talent and industry, we shall be working in his spirit and furthering objects that were always very near to his own heart.

The committee has also been very fortunate in obtaining the consent of the St. Louis Obstetrical and Gynecological Society to act as trustee for such sums as we may be able to secure, and this society will also undertake the administration of the fund under the conditions set forth above.

Mr. W. H. Lee, president of the Merchants Laclede National Bank has kindly agreed to assume the duties of honorary treasurer, and will duly acknowledge subscriptions. All checks should be made payable to Mr. Lee.

Committee: W. A. Hardaway, M. D., chairman; E. H. Gregory, M. D., J. K. Bauduy, M. D., Jno. P. Bryson, M. D., Walter B. Dorsett, M. D., secretary; E. S. Smith, M. D., J. Friedman, M. D.

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Original Communications.

AMEBIC CATARRH OF THE INTESTINAL TRACT.[1]

BY A. A. YOUNG, M. D., Newark, N. Y.

IN OCTOBER, 1892, I was called to see a lad, about 10 years of age, having a temperature of 105½° F., together with a slight diarrhea. The discharges were of a brownish-red color, thin and scanty. His tongue was slightly furred and of a brownish appearance. There were no other apparent or marked symptoms.

At my second visit, on the following day, I found no change of condition, and the inference was then drawn that I had, so far as I was concerned, a new affection to deal with. A consultation was had with my library, and from that I turned away none the wiser. A further investigation seemed imperative and with the appliances at hand the task was begun.

At the bottom of the vessel containing the fecal discharges were small masses of matter which macroscopically had the appearance of berry seeds. These I believed to be the key to the situation. An examination by the microscope showed them to be not berry seeds at all, but an aggregation of cell-growths, each having an independent life, each capable of producing growths of its kind. In size the individual cell was perhaps three or four times as large as the white blood corpuscle, oval in form and, so far as could be ascertained, developed by the process of budding. Accepting the theory that on the development of these germs the disease depended, various intestinal antiseptics were prescribed, but without much marked relief. After about three weeks Dr. John Van Duyn, of Syracuse, N. Y., was consulted. He ventured the opinion, based upon my report, as to the disease being one of intestinal sepsis, primary cause a questionable agent. As to the treatment, no change was advised, which consisted in the administration of salol, salicylate of bismuth, fel porci and olive oil, together with copious and frequent enemas impregnated with creolin were used. Foods were discontinued as far as possible, save water, which was given in

1. Read at the twenty-eighth annual meeting of the Medical Association of Central New York, at Syracuse, October 15, 1895.

abundance. Liquid foods were only allowed and those foods devoid of starch or sugar prescribed.

After about five weeks of what appeared to be a tedious and fruitless service, passages were obtained of a mushy character and of a greenish-black color. These passages proved to be, largely, vitiated bile filled with the cell-growths above referred to. After this passage, signs of improvement were noted, although convalescence was slow and tedious, requiring several months to regain his ordinary strength. In want of a better term, then, for this condition, although the name is doubtless a misnomer, the disease was denominated sporadic intestinal catarrh.

From investigation it was evident to me that the presence of these cells (spores) or amebæ were either due to putrefactive changes in the food products in the alimentary canal or degenerative changes in some of the digestive excretions.

To classify the signs and symptoms of this affection is far beyond my skill, so varied were they. The only evidences of this disease common to all patients, as I have observed them, were anorexia, tenderness (but not marked) along the inferior border of the liver, stools scanty and of a reddish-brown color containing a large number of peculiar cell-growths or amebæ. Urine scanty, high colored and containing an abnormal amount of uric acid. Other signs and symptoms varied from one extreme to the other. The temperature in some cases was as low as 96° F., while in others it reached the 106° F. mark. In some cases pain was intense and not limited to any particular portion of the body, while in others there was a complete absence of pain; the patient simply desired to be let alone in every particular. In some cases the pulse would rise to 140 or more, while in other cases a pulse of 30 or 40 was noted. There also seemed to be a coincidence between a slow pulse and absence of pain. Where there was a pulse of 60 or lower, I remember of no case suffering any pain. This phenomenon I am not prepared at this time to discuss.

From the bronzed condition of the skin, appearance of the stools, and the like, I was led to infer that this affection is not primarily a disease of the alimentary canal or any portion of it, but one that has its beginnings within the ducts of the liver, and that the presence of the germs within the bowel is a coincidence or an accident. To show that their true nidus is within ducts of the liver and that their favorite developing media is the bile, whether vitiated or normal, is one of the objects of this paper. The general symptomatology, further than has been stated, will therefore be

passed by, and in lieu thereof your attention called to a most excellent article, entitled Amebic dysentery, by Dr. Charles G. Stockton, of Buffalo, N. Y., in Volume I., fourth series, *International Clinics*. The affection there described is doubtless the same as the one under consideration and of which our text-books are conspicuously silent.

As has been already intimated, the greenish-black stool, which was composed of vitiated bile and amebæ, always preceded recovery, and the advent of such stools marked the turning point and was an index that convalescence was near. This phenomenon, so patent to me, gave a forcible impression that the liver was the organ in which the pathological condition first made its appearance and that all other allied pathological conditions outside of this organ were secondary or the sequelæ from the invasion of the liver. This theory was materially strengthened by being present at an autopsy, held December 26, 1892, under the auspices of another physician. The previous history of this case, as given by members of the family and attending physician, left no room for doubt but that the affection under consideration (called by one of the attending physicians "winter cholera"), but really amebic dysentery (Stockton), was the cause of his death.

The autopsy revealed pathological conditions existing in the liver and the intestinal tract and all other organs apparently normal. The ducts of the liver were distended and filled with vitiated bile, which was infested by large numbers of amebæ. The liver was abnormally dark and somewhat enlarged; the inferior border extending to one inch below the border of the ribs. The stomach was normal, but below this organ the entire alimentary canal was involved. The intestines contained more or less fecal matter of a reddish-brown color, and of a semi-solid consistency and also containing amebæ in large numbers.

The internal membrane of the bowels was in a semi-disintegrated condition and had evidently lost its integrity previous to death. There was no obstruction of the common gall duct, or other ducts of the liver, save that produced by the gall itself, which was in a gelatinised condition, a condition which I then believed, and still believe, was produced by the amebæ. Suffice it to say that the ante mortem appearance of this patient was similar to that which we have in obstruction of the gall-duct in a mechanical way. This condition appeared about one week previous to death.

Another case still more marked and from which more positive inferences were drawn, came under my observation April 18, 1894, a brief history of which will here be given:

N. M., of Arcadia, N. Y., aged about 65, called upon me, stating that on or about January 1, 1894, he was attacked with a mild diarrhea, unaccompanied by pain, and that the stools were in a slimy condition and of a reddish-brown color, changing occasionally to a gray color. Examination of the stools revealed the presence of amebæ. His tongue was slightly coated, largely on posterior half, and red along the free borders. There was no tenderness in the epigastrium, and some slight pains at times, especially after partaking of food, near the umbilicus. He did not partake of food on account of hunger, but because he considered it a necessity, a duty. During his entire illness the pulse, temperature and respiration ratio were scarcely changed, remaining at, pulse, 76; temperature, 98½°; respiration, 20, except the latter two weeks of life, when the frequency of the pulse was lowered, varying from 50 to 60. Up to May 15th, no material change in his condition was noted, save the gradual loss of flesh and strength. About this date jaundice appeared and became more and more marked up to the time of his death, which occurred about May 27, 1894.

So far as it was possible to learn, there was no elevation of temperature or any material pain from the onset to the close of the disease. The patient simply asked to be let alone. About ten hours after death an autopsy was held and no abnormal conditions found, save those directly connected with the liver. This organ was about normal in size, but of almost a black color and friable. The gall-bladder was empty and the ducts leading from it free and unobstructed. Beginning just above the juncture of the gall-bladder with the gall-duct, there was marked enlargement of the ducts extending into the body of the liver. These ducts were distended from two to three times their natural size by gelatinised gall, in which there was an abundance of these new growths or amebæ. There was no abnormal condition of the intestinal tract, save atrophy of tissues. This condition, however, I believe was due in a large measure to the nonuse of the organs, for since January 1st he had partaken of but little food, and for the last three weeks of his life practically none. In the intestinal tract there was but very little feculent matter. In this, however, a few amebæ were found, not in sufficient numbers to injure the integrity of the tissues.

There being no other cause for death found, save the pathological condition found in the liver, it is fair to infer that the disease

(which may mean amebic development) began, continued and ended within the hepatic ducts; and if in one case it so develops, may it not be the case in all, and may not the presence of amebæ within the intestines be a coincidence only?

If what I have surmised be true as to the etiology of this disease, then our nomenclature must be changed and with it come a corresponding change of treatment also, a treatment as it now appears that will liquify the gelatinised gall and cause its exit through its proper channel into the receptacle nature has provided for it, and the amebæ which it then contains nature may herself destroy and expel or allow us so to do.

ESTABLISHMENT AND EARLY DAYS OF THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF BUFFALO.[1]

By C. C. WYCKOFF, M. D., Buffalo, N. Y.

THE attention of members of the medical profession, not only in this immediate neighborhood, but at a distance, had been frequently directed to this city as a point affording peculiar advantages for medical instruction. The city had in 1845 attained a population of about 30,000 and, by men of good judgment, it was confidently predicted that its population would be doubled in ten years. There was every reason to suppose that Buffalo would maintain its position as the commercial emporium of the northwest. Taking into view its prospective importance and the proportionate facilities and materials for medical instruction, the extensive territory with which it was connected by means of the various channels of communication concentrating here from every direction, as to a central point, it was thought that there was no place between the extreme east and the farthest extremity of our lakes that possessed equal advantages as a locality for a school of medicine with this.

During the legislative session of 1846 an act was passed incorporating the University of Buffalo. This act was broad and comprehensive in its character, providing not only for a collegiate institution of the highest grade, but for a university with a complete organisation of law, medical and theological departments. By the provisions of the act the commissioners named in it were empowered to organise a university whenever $20,000 had been

1. Read at the seventy-fifth anniversary of the Medical Society of the County of Erie, January 14, 1896.

subscribed to its capital stock. This amount having been subscribed, the commissioners gave public notice of the fact, and advertised that a meeting of the stockholders for the election of members of the council, who should administer the affairs of the University, would be held on the 22d day of May, 1846. The stockholders met on the day appointed and the following-named gentlemen were elected to constitute the first council of the University of Buffalo, dividing themselves into four classes to serve one, two, three and four years each: Ira A. Blossom, Isaac Sherman, Theodotus Burwell, James O. Putnam, Gaius B. Rich, William A. Bird, George R. Babcock, Hiram A. Tucker, Joseph G. Masten, Thomas M. Foote, John D. Shepard, Millard Fillmore, Elbridge G. Spaulding, Orson Phelps, Orsamus H. Marshall, George W. Clinton.

On the evening of May 25th this council held the first meeting and it was decided to organise the medical department forthwith, which was done by establishing seven professorships and the election of the following-named gentlemen: James Hadley, M. D., professor of chemistry and pharmacy; Charles B. Coventry, M. D., physiology and medical jurisprudence; James Webster, M. D., general and special anatomy; Charles A. Lee, M. D., pathology and materia medica; Frank H. Hamilton, M. D., principles and practice of surgery and clinical surgery; James P. White, M. D., obstetrics and diseases of women and children; Austin Flint, M. D., principles and practice of medicine and clinical medicine. Five of these seven chairs were occupied by incumbents of similar positions in Geneva medical college. These five professors—namely, Hadley, Coventry, Webster, Lee and Hamilton—still retained their connection with Geneva medical college, and hence for themselves and the students who might desire to attend lectures both in Buffalo and Geneva, it was decided that the first course should be a spring course. It commenced on the 24th day of February, 1847, and continued the usual period of sixteen weeks; the lectures in every department being as full as the course in Geneva.

All these seven professors, especially those from the faculty of Geneva, were men eminent in their several departments and in the profession at large. This at once placed the medical department of the University of Buffalo among the first medical colleges of this country. The other two professors proved themselves worthy compeers and fulfilled the duties devolving upon them with eminent

satisfaction. It is proper to state, however, that Professor George Hadley delivered the lectures on chemistry in place of his father, Professor James Hadley, and was appointed to fill the place permanently and fully equaled his father as a teacher.

Corydon La Ford, M. D., who afterward became one of the most famous teachers of anatomy in this country, was appointed demonstrator of anatomy. He was untiring in his efforts as a teacher, and if all the students did not become good anatomists under his teaching and that of Professor Webster it was entirely due to their own indolence or inattention. Clinical instruction was not neglected during the first term of lectures. The Buffalo Dispensary and the Medical College Dispensary furnished a large number of cases—surgical under the management of Professor Hamilton and medical under Professor Austin Flint.

I wish I could present to you a graphic picture of these first seven professors as they appear to me in memory—the dignified and serious Hadleys, father and son; the courtly Christian gentleman, Professor Coventry, whose innate modesty put him to the blush upon demonstrating his obstetrical lectures upon the manikin; the agile and oftentimes brilliant Hamilton, entering the amphitheater almost upon a run, lecturing as he came, and seeming only desirous of improving every moment to give us the benefit of his vast store of learning; the more dignified Flint, who at the beginning of his career as a lecturer was somewhat inclined to verboseness, but who afterward attained an eminence in this branch of the profession as may make us justly proud of having given him to the world; the daring White, who raised such a storm of abuse, which he manfully met, when he introduced "demonstrative midwifery;" the companionable, convivial Webster, his own worst enemy, who was masterly at dissection, lecturing as rapidly as the scalpel cut into the tissues of the subject, never for a moment at a loss for words to explain the hidden course of nature. Oftentimes Dr. La Ford would have to perform the duties of a lecturer as well as those of a demonstrator of anatomy, but it was at no loss to the students. Professor Lee was perhaps less known to us, as he always retained his home in New York, but his uniform kindness made him popular, although his subject was dry and prosy.

The first term of this institution started off with sixty names on the register, which was considered by the faculty as very encouraging, especially as they had adhered to a cash system

exclusively, while many colleges of that day were in the habit of extending credit to some of their students for tickets. The council of the University rented for a term of years an edifice located on the corner of Washington and Seneca streets, that had been used, I think, as a church, which after suitable repairs and alterations proved admirably adapted for the purpose of a medical college. A pictorial representation of the college building was correctly given in the first annual announcement.

The *Commercial Advertiser* of Wednesday evening, June 16, 1847, contained this report of the first commencement of the medical college :

The commencement of the Medical Department of the University of Buffalo was held this forenoon at the First Presbyterian Church, according to the published program of exercises. After an earnest and appropriate prayer by the Rev. A. T. Hopkins, the Hon. Millard Fillmore, chancellor of the university, delivered a brief address, reviewing the educational history of our city, and drawing from the experiences of the past and the facts of the present, incentives to persevere in the efforts to build up at this point a university that should be commensurate with the present and future wants of our city, and alike honorable to its enterprise and zeal for intellectual culture.

The degree of doctor of medicine was then conferred by the chancellor upon the following young gentlemen : Bela E. Phelps, George B. Parker, S. C. Rogers, Jas. E. King, M. H. Andrews, John P. Dudley, Delos M. Norton, H. D. Garvin, Sidney A. Foss, Wells Taber, Horace S. Lindsley, J. A. Whiting, H. W. Barrett, John Hardy, George Abbott, William Ring, Z. A. Blake.

An address to the graduates, characterised by good taste and replete with excellent advice, was delivered by the dean of the medical faculty, Professor F. H. Hamilton, when, after singing by the choir, the audience was dismissed with a benediction by the Rev. Mr. Schuyler, of St. John's church.

Thus closed the first literary exercises of the kind ever witnessed in Buffalo. The church was thronged by a large attendance of our most estimable citizens, and from the happy manner in which everything went off, and the general interest apparently felt in the prosperity of the institution, we anticipate the best results for the future.

The number of students graduated at the first commencement was seventeen. At the second commencement, which took place June 14, 1848, there were thirty-two graduates, about doubling the number of the preceding year, while the number of students enrolled for this year was ninety-five.

At this commencement, at which I received my degree as M. D.,

Dr. Thomas M. Foote conferred the degrees in the absence of the chancellor, Hon. Millard Fillmore, and Professor Austin Flint delivered the address to the graduates.

Land had been purchased on the corner of Main and Virginia streets for a medical college building, which was then in process of construction.

The public-spirited citizens who contributed towards the construction of this first permanent home for the medical department of the University of Buffalo were A. D. Patchin, whose name heads the list with a subscription of $500. The largest donor was Jesse Ketchum, who gave $600. Subscriptions of $200 each were given by Albert H. Tracy, George W. Tifft, E. G. Spaulding and Jabez Goodell. Eighty subscriptions of $100 each were given and the remainder made up in smaller amounts, until an aggregate of $12,000 was reached, which with an appropriation of $2,000 from the state assured a sufficient sum to warrant the construction of the then new, but now old medical college building of the University of Buffalo, so well known to all of its alumni. This building, which at that time was considered a very fine structure, as compared with the handsome edifice which now shelters the University of Buffalo, proves the original founders were not only true prophets of the prospective growth of our city, but also that the medical profession has kept pace with that growth in the advance of science as well as in prosperity.

482 Delaware Avenue.

HYSTERECTOMY IN PUERPERAL SEPSIS.[1]

HERMAN E. HAYD, M.D., M.R.C.S., Eng.

THE subject assigned me for discussion this evening resolves itself into a very much-debated question in surgery: Is hysterectomy ever justifiable in puerperal sepsis? And on account of the gravity of this surgical procedure, together with the difficulties associated with absolute diagnosis, there will always be room for honest doubt and spirited controversy.

It has been shown by the previous speakers that puerperal infection readily takes place through rents in the vagina and cervix, from the decomposition and breaking down of retained clots and secundines, from adherent portions of placental tissue and from septic endometritis and metritis, either due to these enumerated

1. Read before the Buffalo Academy of Medicine.

causes or independent of them. It has also been satisfactorily demonstrated that septic peritonitis and post-puerperal fever may result from a latent pyo-salpingitis or tubo-ovarian abscess, from a suppurating ovarian cystoma, from an intraligamentary cyst or fibroid, or from dermoid or pelvic cellulitis, due to lymphatic absorption and infection consequent upon injuries of the cervix and uterus during parturition or operation.

Many cases have been operated upon successfully and life has been frequently saved by removing these different, recognized, pathological conditions; in fact, such complications every modern surgeon would not hesitate to operate for at once.

There exists, however, a certain group of cases where the tubes and ovaries are but slightly involved, if at all, and where the uterus, although movable, is still the seat of grave lesions, say a septic endometritis and metritis, with pus and multiple abscesses in the walls of the organ. It is in this definite, but limited, class where the most delicate and discriminating judgment is required to make a diagnosis, but when it can be made, there can be no question about the operative indications. Pus here, as elsewhere, must be evacuated. It would, however, be folly to expect that anything short of total extirpation could relieve such a condition; therefore the whole septic uterus must be taken away and the patient given at least the only chance to save life.

Dr. Baldy, of Philadelphia, has written very largely on this subject and has collected a number of cases from his own work and that of Kelly, Hirsh, Smith, Davis and others.

Hysterectomy in a puerperal patient suffering from double pyosalpinx of gonorrheal origin and recovery is not an uncommon result; and perhaps it may be laid down as a broad proposition that bilateral disease of the annexa in a puerperal patient should demand total extirpation of the uterus and its appendages; because we can never be positive that there does not exist in the uterus septic foci, and accumulations of pus within its muscular layers. Moreover, the time required to remove the uterus and the shock and dangers of the radical operation are but so slightly increased that most prominent operators advocate the most extreme measures.

In a paper written by Baldy, in which he reports fifteen operations, I find in six of the cases there was no disease of the appendages, and the lesions in the uterus are stated to have been pus in the uterine walls and uterine sinuses—disintegration of the uterine

walls and gangrene; and yet four of these patients recovered. Of the remaining nine, tubal, ovarian and broad ligament infiltration and suppuration existed in four, and two of these recovered by operation. There can be no question, then, that these cases, representing as they do the work of honest and conscientious observers, justifies the operation of hysterectomy for puerperal sepsis, either with or without tubal or broad ligament involvement.

Notwithstanding the more careful instruction in obstetrics and a better appreciation of the more common causes of puerperal infection, a great many women are every day dying from the effects of puerperal septicemia, and the more we can impress ourselves with the local origin of this horrible disease the sooner will we find the means to combat and prevent it. It seems to me that this disease—so-called puerperal fever—is of local origin, and its treatment must very largely be topical. Refinements in diagnosis and more perfect methods of examination will from time to time be developed, and then even the acute fulminating varieties will be operated upon early and, perhaps, life saved. The great surgical axiom must be, operate early, before too great blood infection and dyscrasia has taken place. Of course, in assuming such advantages, terrible responsibilities must inevitably follow, and so great will be the dangers of too early and too frequent operations that this life-saving, scientific procedure will be much abused and many deaths result from its careless application.

It must not be forgotten that most cases of puerperal infection get well by simple sedative treatment, endometritis, metritis, salpingitis, ovaritis and peritonitis—complications frequently seen—undergo resolution and tubes previously closed and adherent become free and patulous.

But this is more often the case when the inflammatory exudates do not go on to suppuration, and I am sure I am justified in making the statement, when pus can be diagnosticated, tentative, tonic and building-up treatments are out of the question, and an incision, whether by laparatomy or vaginal hysterectomy, or simply an incision through the vaginal vault, is the only course to pursue, and it should be done with the greatest dispatch.

Some men, and particularly Mordecai Price, argue that hysterectomy for puerperal septicemia is a criminal operation, and maintain that all cases of puerperal sepsis which can be influenced at all will be relieved by the finger and intrauterine douche. There can be no doubt that many cases of marked infection have been

cured by these simple measures, and if we add to them the curette and gauze packing in cases where septic endometritis and metritis exists, the group grows very much larger; but there will always remain a limited number of desperate cases where pus exists in the muscular wall and uterine sinuses and nothing short of total hysterectomy promises anything. This class of cases I have already alluded to in this paper, and after studying very carefully those reported by Baldy, I am convinced that surgery offers some hope when the diagnosis can be established. It is, therefore, a reasonable expectation in a given case of pronounced sepsis where the uterus has been carefully and thoroughly cleaned out, and where chills, rapid pulse and leaky skin continue, to hope for good results by an early hysterectomy. Delay in such a case is cowardice and robs us of what little hope of success there remains.

Occasionally epidemics of puerperal fever occur, where the systemic infection is so overwhelming and the local evidences of the disease so slight and death so certain and rapid, that surgery offers but very little, if any, assistance.

78 NIAGARA STREET.

ESTABLISHMENT OF THE MEDICAL DEPARTMENT OF NIAGARA UNIVERSITY.[1]

By JOHN CRONYN, M. D., president of the faculty.

THE religious order to which Niagara University owes its existence was founded about 270 years ago by St. Vincent de Paul, who was also founder of the community distinctively known as the "Sisters of Charity." In 1856, Father Lynch, C. M., —subsequently Archbishop of Toronto—established, near Suspension Bridge, on historic ground overlooking the Niagara, the College and Seminary of our Lady of Angels, placing it in charge of the Vincentians, of which order he was himself a member. The schools began then a work that has been steadily and increasingly prosperous.

The subject of adding other departments to the colleges of theology and arts was at several times considered. Indeed, with Father Rice, of revered memory—second president of the institution—long ago, I had many conferences in regard to the possible

1. Read at the seventy-fifth anniversary of the Medical Society of the County of Erie, January 14, 1896.

and much-needed medical school. Not, however, until 1883 were some of these plans realised. In that year the colleges were erected into a university by the Regents of the University of the State of New York. Invested with the full powers and authority of a university, Niagara acquired also, by an act of the legislature, the right to establish colleges and grant degrees in both Erie and Niagara counties. In 1883, the medical faculty was organised, which began teaching in September of that year.

Truth compels me to add that Erie County Society served Niagara University and the new medical school only by opposing the granting of its charter to the first and by hindering as much as possible the establishment of the second. We have forgiven the society.

Although the trustees were anxious and prepared to organise the medical department, so far as its *personnel* and authority to teach might go, all financial responsibility devolved upon the men who composed the faculty. They put their hands into their pockets and spent the to them not inconsiderable sum of $50,000, which represented in some degree their earnestness of purpose and the sacrifices they were ready to make for the cause of higher medical education. This, in brief, was the beginning of the Medical Department of Niagara University, of which you have done me the honor to ask me to speak.

The college opened in 1883 with a class of ten young men. Dr. Lothrop, Doctors Gay, Tremaine, Heath, Ingraham, Hubbell, Davidson, Campbell, Pitt, Stockton, Mr. Congdon, S. Tucker Clark and myself comprised the faculty.

Very early in its history death robbed the faculty of several valued members. Other causes made changes more or less inevitable, but the most active workers of the initial year are still active. They have seen the faculty grow to the number of sixteen professors and thirteen adjunct professors and lecturers, the students multiply tenfold, the Sisters' Hospital and other institutions, whose wards are open for Niagara's clinics, prosper and grow in a notable manner.

In conclusion, let me say that the Medical Department of Niagara University has many reasons for existing and for gladness in its existence, not the least being the fact that it has insisted upon a three years' course of study as the minimum; that it has obliged its students to preliminary examinations in Latin and higher English, or to give evidence that they have made the necessary

studies therein; that it has compelled other colleges in the state to follow its example; that it has been instrumental in obliging the state authorities to enact severer laws in regard to the qualifications of medical men; and finally, that, largely in consequence of its action, the profession all over the state and the people in general have been benefited beyond, far beyond, what it is now possible to realise.

55 WEST SWAN STREET.

REPORT OF A CASE OF OTITIC BRAIN ABSCESS, WITH REMARKS ON DIAGNOSIS.[1]

BY ALVIN A. HUBBELL, M. D., Buffalo, N. Y.,
Professor of ophthalmology and otology, Medical Department of Niagara University.

WILLIAM B., aged 20, born in the United States, occupation, waiter; entered Erie County Hospital, July 22, 1895, with a history of having been indisposed for some time previously with headache, loss of appetite and nausea. The left ear had discharged since he was six years of age, but from what cause he did not know. He did not remember having had measles, scarlet fever or diphtheria. During the last three days he has had severe pain in the left ear and left side of the head, and had been unable to take food or to sleep. Upon examination a polypus was found nearly filling the left auditory canal, and there was also a considerable and offensive discharge from this ear. He complained of soreness and increased pain when the ear was handled, but there was no swelling or tenderness over the mastoid. At that time and on the day following, I regarded the case as one of acute otitis, supervening upon the chronic otorrhea.

On July 23d, I removed the larger portion of the polypus with a snare and ordered the ear to be gently syringed with warm antiseptic solutions three or four times a day, and the patient kept in bed.

July 25th.—The auditory canal was somewhat swollen and painful and the fetid discharge continued. The head-symptoms had become more pronounced and the patient seemed dull and restless. The pulse was 60 and full; respiration, 10; temperature, 97; pupils reacted slowly to light. I expressed myself as being suspicious of an intracranial, probably cerebral, abscess. An ice bag was ordered to be applied to the side of the head and around the ear, and the ear syringed with warm boracic acid solution, to be followed by instillations of diluted alcohol twice a day.

July 26th.—Patient has increased pain in the head and ear and has been very restless; pulse, 63; temperature, 99½; respiration, 32.

1. Read before the Buffalo Academy of Medicine, February 4, 1896.

Ordered opiates to relieve pain. My diagnosis of cerebral abscess was quite positive and I requested the attending neurologist and surgeon to see the case the next morning with a view to an operation, should they coincide with me in the diagnosis.

July 27th.—Drs. Putnam and E. A. Smith saw the case this morning and viewed the symptoms in somewhat different light from what I had and did not advise an operation. In the afternoon I found that the patient had had a convulsion. Pulse was 50; temperature, 97; respiration, 10; face somewhat livid. Stimulants were given, counter-irritants applied to the back of his neck and his feet put in hot mustard water.

July 28th.—At 2 A. M. patient had another convulsion, pulse went down to 32 and the respiration was 4 or 5 per minute. The patient was given stimulants freely and he rallied from what was feared to be a moribund condition. Previous to this convulsion for twenty-four hours, the pulse had ranged from 60 to 70 and the temperature from 100 1-5 to 101 1-5, and the respiration from 16 to 20. At 8 A. M. the pulse had risen to 70, temperature, 101 3-5, and respiration, 18. At noon the pulse was 74; temperature, 100 4-5; respiration, 20. At 2.30 P. M. patient had another convulsion. Stimulants were again given and counter-irritants applied to the back of the neck. He slept quietly for three hours. At 6 P. M. he vomited a greenish fluid. At 8 P. M. the pulse was 80; temperature, 101. At midnight pulse was 110; temperature, 101 4-5. He was delirious all night.

July 29th.—Another consultation was held, there being present Drs. E. A. Smith, Tremaine, Putnam and myself. The patient was then in a comatose state and was rapidly sinking. The pulse had become very rapid and weak and the temperature had risen to 103 3-5 and the respirations to 30. My diagnosis of celebral abscess located in the tempor-sphenoidal lobe of the brain was presented to my consultants and my reasons for it explained. The patient's condition, however, was so extreme that any operation for exploratory or therapeutic purposes was agreed to be inadvisable. At 4 P. M. the patient died.

By way of recapitulation I may add to the above hospital record, which in some respects is not as full as it might be, that the patient came into the hospital very sick. He had had pain in his left ear and left-sided headache for two or three weeks, with loss of appetite, nausea, history of chilliness with some fever and deprivation of sleep. He soon showed the characteristic mental sluggishness and finally delirium, the chills, vomiting, dizziness, prostration, convulsions, and the normal, slightly subnormal, or moderately elevated temperature, the slow full pulse, slow respiration, together with the history of otorrhea, polypus of the middle ear, acute

ear-symptoms, developing on the chronic, and the significant pain in the ear and head. There were no symptoms or history of mastoid disease at any time. Judging by the results of the post mortem examination, the time required for the formation of such an amount of pus must have far exceeded the seven days that he was in the hospital. The disease must have been in progress in the brain for two or three weeks before his admission.

Post mortem examination was made July 31st, by Dr. H. U. Williams, who gives me the following report:

The convexity of the brain shows recent acute fibrinous leptomeningitis. The same condition existed in a more marked degree at the base, involving the surface of the pons and medulla from the basilar arteries, etc., reaching anteriorly to the optic chiasm. Moderately firm adhesion on the left side fastened the tempor-sphenoidal lobe to the upper border of the petrous portion of the temporal bone, one-half inch from the squamous portion, around which adhesion was abundant yellowish lymph. Opposite these adhesions was a cavity in the tempor-sphenoidal lobe, the size of a walnut, lined by grayish necrotic tissue and containing pus with shreds of grayish necrotic tissue. This cavity connected with the middle ear by two or three distinct openings through the roof of the latter.

I was present at the post mortem examination, and I will add to the statement of Dr. Williams that the bone immediately over the tympanic cavity was denuded of its periosteum as well as perforated by a number of small openings. (Brain exhibited.)

REMARKS.

This case is quite a typical one of cerebral abscess, and I offer it as an introduction to what I have to say on this important subject.

It was, comparatively, but yesterday since brain abscess was regarded at all as a curable disease. Before this, the prognosis, especially in the otitic form, was very unfavorable, almost every case terminating fatally. But in 1886, when Dr. Truckenbrod[1] reported a case operated upon by Dr. Schede, of Hamburg, Germany, and which was cured, and Mr. Arthur E. Barker, of London, for Dr. W. E. Gowers[2] trephined for cerebral abscess of otitic origin, the patient recovering, a new impetus and hope was given to the treatment of this disease. In view of the results obtained by surgical measures, the diagnosis becomes of supreme interest and of greatest concern.

FREQUENCY AND RESULTS.

As the literature of the disease shows, and especially during the past ten years, when surgery has greatly augmented the statistics, brain abscess of otitic origin is found to be by no means an extremely rare affection. Within my own observation, during the past six years, I can recall at least eight undoubted cases, in two of which the diagnosis was confirmed by post mortem examinations. Nearly all experienced practitioners probably could bear similar testimony. Many cases of brain disease, furthermore, have been treated heretofore, and have died, that were very probably otitic in origin, but the etiology had been overlooked. Arthur E. Barker,[3] of London, found that in ten years (1878–87 inclusive,) according to the registrar-general's reports, 3,570 had died from "otorrhea." He adds: "If it were possible to sift all these latter groups ('simple meningitis,' 'unclassified brain disease' and 'general septic affections') and to rearrange them according to the primary cause of death, there can be no doubt that these annual 400 deaths, attributed to ear disease, would be swelled to four or five times the number." Dr. G. Newton Pitt,[4] of London, in an analysis of 57 autopsies of cases in which ear trouble had set up brain disease, found that they were from a total of 9,000 autopsies, showing 0.66 per cent. "Further examination shows," he says, "that 27 of the cases had occurred during the last four years, which would raise the ratio for that period to 2 per cent." Dr. Thomas Barr,[5] of Glasgow, found that in London, in 1882, there were 86 deaths attributed to otorrhea, and in eight principal towns of Scotland the number for one year was 26. He believes these numbers, "considerable as they are, do not express anything like the real number of victims of this disease who perish annually" in those places.

In 1892, Dr. Frank Allport,[6] of Minneapolis, Minn., collected 169 cases, mostly reported since 1879, each of which had had "an ear difficulty resulting in intracranial trouble, death, and an autopsy," or had had "an ear difficulty resulting in intracranial trouble, and the intracranial cavity had been exposed by operation."

I might add much more and similar testimony in this direction, but the above is amply sufficient to show that intracranial disease arising from otorrhea is not a rare affection. Moreover, the otorrhea need not necessarily be chronic in its nature, as Eulenstein[7] has recently reported 18 cases of cerebral abscess developing after acute inflammation of the middle ear or temporal bone,

and Allport[6] has reported 10 cases. Cerebral disease following ear disease has been found to be so frequent that most insurance companies regard suppuration of the middle ear as a sufficient cause for the rejection of an applicant affected by it.

Ear suppuration does not always lead to the same disease of the brain, or to disease in a particular part of the brain. For example, the intracranial affection may be phlebitis and thrombosis of the large sinuses, or meningitis, or cerebritis, with or without suppuration.

If brain abscess develop, it may be within the dura mater, or in almost any part of the cerebrum or the cerebellum or even in the pons varolii. Dr. G. Newton Pitt[8] says: "Cerebral abscesses occur rather less frequently than meningitis or thrombosis." Allport,[9] in the 169 cases collected of otitic brain disease, found 98 of them abscesses proper. Dr. Macewen,[10] of Glasgow, has reported 94 cases of intracranial lesions from ear disease, of which 25 were abscesses of the brain and 5 extradural abscesses.

In the majority of cases these abscesses are near that part of the ear from which the infection proceeds. Dr. Pitt[11] says: "In two-thirds of the cases the cerebral abscesses occur close to the roof of the tympanum." In another place he says:[12] "These abscesses are almost always situated very close to the roof of the tympanum. . . . . Cerebellar abscesses are less common and will probably be associated with disease of the dura mater, behind the petrous bone."

The position of the brain abscess, according to Von Bergman,[13] is always a typical one, and is either in the temporal lobe or in the side of the cerebellum corresponding to the diseased side. Dr. Thomas Barr,[14] of Glasgow, has analysed 76 cases of brain abscess, and found it located in the cerebrum (temporal lobe) in 55 cases; in the cerebellum, in 13; in both, in 4; in the pons varolii, in 2; in the crus cerebelli, in 1. Körner,[15] in 100 cases of brain abscess, found it 62 times in the cerebrum, 32 times in the cerebellum and 6 times in both.

When the abscesses are in the cerebrum they are, according to A. E. Barker,[16] situated "almost invariably in the temporal lobe, behind a line drawn vertically through the tragus. From this they may extend backward into the occipital lobe to a greater or less extent, and very rarely forward toward the apex of the temporal lobe. But these exceptions are so uncommon that they need hardly to be considered for practical purposes." In the cases of

cerebellar abscesses we find them, he says, "almost invariably seated in the anterior portion of the lateral lobes, where these lie in contact with the posterior surface of the petrous bone and lateral sinus."

Macewen,[17] in 17 cerebral abscesses, found them in the temporo-sphenoidal lobe 10 times; in the frontal, 2; in the parietal, 1; "superficial" (ulceration of brain), 4.

So much for the frequency and situation of otitic brain abscess. As to results of treatment, it may be said that before 1886 it was well-nigh hopeless, unless, perchance, a spontaneous opening and evacuation took place. In 1885, Schede,[18] after having chiselled open the mastoid, found, two weeks afterward, symptoms of brain abscess, and by these symptoms, the great edema, above and behind the mastoid, and a fistula extending upward and beneath the periosteum into diseased bone, was led to extend his former opening by chiselling, until the abscess in the brain was reached and evacuated. In the same year A. E. Barker[19] made the more signal innovation of proceeding at once to find and evacuate a cerebral abscess, acting alone upon the evidence of the diagnosis, "quite independently of visible or tangible change, beyond a slight moisture of the middle ear, there being no evidence whatever, externally, as to what was going on within the skull."[20] The reports of these two cases gave a wonderful impetus to the surgical treatment of brain abscess. What have been some of the results? In 1893, Heiman[21] reported 32 cases operated upon, 17 of them recovering. Von Beck[22] has collected 36 cases that have been operated upon, including 29 in the temporal lobe, of which 17 of the latter were cured. Körner[23] says: "Of the 55 abscesses which thus far have been evacuated, 29 ended in recovery, 26 in death." Macewen[24] published, in 1893, 25 cases of brain abscess, of which 19 were operated upon, and all but one recovered. Dr. Barr,[25] of Glasgow, in his address at the International Otological Congress, held in Florence the past year (1895), said that at least 59 cases of cerebral and 7 cases of cerebellar abscess had been successfully treated.

Such results as these, in otherwise hopeless cases, mark a surgical triumph and a saving of life that compel a study of diagnosis, and a determination of pathological conditions in this direction, never before so imperative as now, on the part of all practitioners of medicine. Von Bergman[26] has forcibly said: "Whoever knows, as we do, that there is no other termination to cerebral suppuration than a fatal outbreak into the ventricles, or equally fatal meningitis,

must look upon the surgical opening of cerebral abscesses as the rescue from an urgent danger to life." Sahli[27] adds: "In this province much has already been done, and, with increased refinement in diagnosis, much more remains to be accomplished."

My remarks, so far, are intended to lay stress upon the frequency with which otorrhea leads to brain abscess, together with its most probable situation, and to bring prominently into view the rich fruitage yielded by surgical interference; and all this culminates in a tremendous urgency of correct diagnosis.

It should be borne in mind that brain abscess from ear disease is not always a simple, isolated process, but is often associated with meningitis, thrombosis and mastoiditis. When these or other associated affections are present, the symptoms of abscess may be confused and masked. Hence, in restricting myself here to the diagnosis of brain abscess alone, the possibility of the coëxistence of other diseases should not be forgotten.

DIAGNOSIS.

The progress of brain abscess may be divided into the initiatory, established and terminal stages.

In the *initiatory stage* there is a history of otorrhea, generally chronic in character, with discharge, slight or profuse, fetid, and oftentimes there are present one or more polypi in the external auditory canal. Following some injury or exposure, acute inflammatory symptoms arise in the ear or mastoid, characterised by tenderness and swelling about and behind the ear, and pain in the ear or in the temporal region, or indefinitely extending with more or less severity over the corresponding side of the head, and sometimes to both sides of the head. The discharge of the ear at this time often diminishes or ceases. Chilliness or pronounced rigors may be felt and there may be slight or marked elevation of temperature. The patient loses appetite, sometimes has nausea, and is sleepless and restless from the pain. The pulse is increased in frequency, the tongue becomes coated and there is general weakness and prostration. This stage lasts from two to ten days and the symptoms gradually merge into those indicating the development of encephalic disease.

When intracranial disease is *established*, the first symptoms are essentially those of encephalic inflammation. The previous headache is increased and often becomes excruciating, and extends from the side of the diseased ear to all portions, even to both sides of

the head and down the back. There is restlessness, nausea and sometimes vomiting, chilliness, temperature raised from 100° to 102°, and variable. There is thirst, continued loss of appetite, and constipation. There may or may not be tenderness on pressure of the affected side. This inflammatory period extends for a number of days and is followed by symptoms depending upon suppuration and intracranial pressure. Those depending upon suppuration are the same as those found in any suppuration—namely, chills, slight or severe, febrile manifestations with a moderate rise of temperature, perhaps not as high as before, with sweating and weakness, dizziness, and the disturbances of the stomach may also continue. These symptoms may last indefinitely, for several days to two or three weeks, when those of pressure appear. Then, the headache may be slight or at times severe, and may become fixed and correspond to the location of the abscess, although it is more apt to be distributed over the entire head and, as I have seen, even extend into the spine. This headache is increased by muscular exertion, by a low position of the head, or by acceleration of the circulation from increased fever or use of stimulants. Percussion over the side of the head affected increases the pain. The dizziness is usually increased by change of posture, and if the middle lobe of the cerebellum becomes affected there may be unsteadiness of gait. Vomiting and derangements of the digestive organs may be increased, with occasional diarrhea. To these are superadded mental irritability, and the mind becomes dull, with slowness of thought, imperfect attention, impaired memory, occasional delirium, all increasing as the pressure in the cranial cavity increases, till there is great prostration, continuous delirium or stupor. The pulse is slower than at first, ranging from 50 to 65, and the temperature fluctuates around the normal line, sometimes being a little below, sometimes a little above. The respirations are also less frequent than normal and may approach the Cheyne-Stokes form in cerebellar abscess. Late in the disease, however, the pulse and respirations become more frequent and the temperature rises. The patient may continue to be chilly at times, but pronounced rigors are rare. Optic neuritis is frequent, especially in the later periods of the disease, and is not peculiar to any special situation of the abscess. When the abscess has so extended as to encroach upon the motor area of the cortex, convulsive movements or convulsions may take place. When reaching by disintegration or pressure to the motor tracts, there may be paralysis, which is chiefly hemiplegic, though incomplete,

and is on the side of the body opposite the side of the head affected. It frequently follows unilateral convulsions, and it may be limited to the arm, with or without implication of the face. If the occipital lobe becomes involved, there may be hemianopsia, and encroachment upon the left frontal lobe may cause aphasia. Paralysis of the facial and auditory nerves may arise from disease of the temporal bone, and in such a case is always found on the side of the affected ear, and is usually incomplete.

Paralysis of the third cranial nerve on the same side as the lesion occurs in some cases of large abscess in the temporal lobe, and is shown by ptosis, divergent strabismus, indeed by paralysis of all the ocular muscles, except the external rectus and superior oblique, with dilatation of the pupil. Nystagmus, inequality in the size of the pupils, sluggish pupillary reaction to light, change of deep and superficial reflexes, peculiar fetid odor to the breath, "grayish" color to the face, and bodily emaciation may be noticed, but they are not of special diagnostic value. Dr. Macewen[28] describes the "elicitation of a differential cranial percussion note," but if such "note" exists, it requires a nicety of technique and discrimination to make it apparent that few can attain. It is not, therefore, of special importance in the hands of most practitioners.

The *terminal stage* of brain abscess, when allowed to pursue its course without surgical interference, ends, with very rare exceptions, in death. It is marked by symptoms of increasing pressure, with deepening stupor and coma, and by those caused by oozing of pus or rupture of the abscess into the ventricles or on to the surface of the brain. The latter excites fresh irritation and a rapidly spreading inflammation follows. This is generally indicated by the recurrence of "vomiting, restlessness, temporary squinting, flushing and erratic rigidity of the limbs, clonic spasms, trepidation and prostration, the pulse meanwhile becoming quick, the breathing hurried and the temperature high."[29]

If the abscess bursts into the ventricles, the symptoms appear more abruptly and are very marked, the whole aspect of the patient changing with great rapidity. The pupils become dilated, face livid, respiration hurried and perhaps stertorous, temperature rises to 104° or 105°, the pulse becomes quick and small, muscles twitch, or perhaps there are convulsions, and coma and death speedily follow.

Brain abscess is almost always acute in its course, but so-called latent or chronic cases have been recorded. It is possible that an

abscess may become encysted. The duration, therefore, of the existence of an abscess varies within wide limits.

Spontaneous cures have been recorded, but they need not be looked for, and I need not consider them here.

SUMMARY AND CONCLUSION.

To summarise, then, the diagnosis of brain abscess is made probable by:

1. The history of the case and of a preceding otorrhea and ear trouble.

2. Those general symptoms pointing to inflammation in the cranial cavity—namely, headache; nausea; vomiting; chilliness or chills; moderate elevation of temperature.

3. Those general symptoms indicating suppuration: Headache; chills; temperature a little elevated; nausea and sometimes vomiting; dizziness; optic neuritis, not always; followed by

4. Those symptoms caused by pressure from accumulation of pus: Mental sluggishness; temperature, not high, occasionally sub-normal; respirations, less frequent; pulse, slower (50 to 65); prostration; stupor; delirium.

5. Those localising symptoms of temporo-sphenoidal abscess: Convulsions, if the cortical motor area is involved or pressed upon; aphasia, if the speech center is reached in the left frontal lobe; hemianopsia, if the occipital lobe becomes affected; hemiplegia (opposite side and generally partial), if the internal capsule of the brain is pressed upon or involved, or if the cortical motor centers are destroyed; paralysis of the third nerve of the affected side, if contiguous pressure and meningitis are sufficient.

6. Those localising symptoms, if the abscess is cerebellar: Cerebellar incoördination, if there is pressure or involvement of the middle lobe of the cerebellum; persistent occipital pain, in some cases.

In studying and analysing a given case of otitic brain abscess, the differentiation must be made between it in its different stages, and acute purulent otitis or mastoiditis, meningitis, thrombo-phlebitis of the large brain sinuses, extradural collections of pus, and brain tumor, the symptoms of which I must pass over at this time.

Most writers regard the diagnosis of brain abscess as difficult, while others seem to view it as comparatively easy and certain.

Heiman,[30] of Warsaw, says: "In three-fourths of the cases of otitic brain abscess the course is such that a diagnosis can be made.

The careful weighing of all the symptoms, the localisation of the bony affection (temporal bone, A. A. H.), the etiological elements, and the length of time the patient has been under observation, if carefully considered, enable us not only to diagnosticate the abscess, but often to locate it." Dr. Barr[31] says "that an uncomplicated abscess in the temporo-sphenoidal lobe may be said now to belong to the region of certainty."

Should there, however, remain doubts as to the existence of abscess after earnest and careful study of suspicious symptoms, an exploratory operation should be performed and search made with aspirator for the presence of pus. If pus is found, the operation may be extended so as to evacuate it; and if not found, the wound may be closed without jeopardising the life of the patient. In three cases I have seen the exploratory operation made without finding pus and without shortening the life of the patients.

Von Bergman[32] in his monograph upon the surgical treatment of intracranial disease (Hirnkrankheiten), asserts that the history of otorrhea, past or present, together with persistent sleeplessness and a temperature remaining steadily at about 99°, are sufficient indications for opening the cranial cavity for the purpose of exploration.

Let me finally urge that these considerations in regard to the diagnosis of brain abscess be pressed home to every one of us, and stimulate us to a judicious and timely resort to those surgical measures which, today, promise so much in this disease.

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25. Archives of Otology, Vol. XXIV., 1895, page 309.
26. Truckenbrod, Archives of Otology, Vol. XXI., 1892, page 184.
27. Ibid, page 184.
28. Loc. Cit., p. 146.
29. Macewen, loc. cit., p. 143.
30. Archives of Otology, 1893, Vol. XXII., p. 55.
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32. Dench, Diseases of the Ear, 1894, p. 44.

212 FRANKLIN STREET.

THE SYMPTOMATOLOGY AND PATHOLOGY OF EXOPHTHALMIC GOITRE.[1]

(BASEDOW'S DISEASE—GRAVES'S DISEASE.)

BY WILLIAM C. KRAUSS, M. D., Buffalo, N. Y.,
Professor of nervous diseases, Medical Department of Niagara University.

EXOPHTHALMIC goitre typically developed in an individual, is not at all difficult of diagnosis, although the treatment is somewhat discouraging and long-continued. It is, therefore, not my purpose to dwell upon typical cases of this affection today or to review with you the old-time and worn-out methods of treatment, but to call your attention to the "*formes frustes*," or illy-developed cases, and to report my manner of treating this disease. Before speaking of the *formes frustes* it might be well to review briefly the chief points of importance of this disease, especially the progress made in the past ten years, regarding its symptomatology, pathology and treatment. Exophthalmic goitre was first studied by Graves, the famous Dublin physician, in 1835; later by von Basedow, a celebrated physician of Merseburg, Germany, in 1840. It was found most commonly in women of middle age, although cases are on record where it was found in young girls, also showing some disposition to hereditary transmission, as evidenced by a case reported by Déjèrnie, where for four generations it remained a

1. Read at the twenty-eighth annual meeting of the Medical Association of Central New York, at Syracuse, October 15, 1895.

family disease. I have seen mother and daughter affected several times, but could trace it back no further. Oesterreicher reports where eight out of ten children in one family suffered, in various degrees and at various ages. It is met with less frequently in males, the proportion being five to one. Whether this great disproportion is due to the fact that the female is more often the victim of the emotions, sudden terrors or prolonged distress, would be difficult to say, but in my experience with this disease, those of the male sex afflicted were more or less effeminate in their ways and lacked those qualities which characterise the sterner sex.

SYMPTOMS OF EXOPHTHALMIC GOITRE.

Primary or Cardinal Symptoms...		Tachycardia.
		Goitre.
		Exophthalmus.
		Tremor.
Secondary or Concomitant Symptoms.	Of Digestive Tract...	Vomiting.
		Diarrhea.
		Bulimia.
		Icterus.
	Of Respiratory Tract..	Cough.
		Frequent respiration.
		Dyspnea.
		Angina.
	Of the Eye	V. Græfe's sign.
		Möbius' sign.
		V. Stellwag's sign.
		Becker's sign.
	Of the Nervous System	Nervousness.
		Emotional states.
		Neuralgias.
		Epileptiform convulsions.
		Psychoses.
	Of the Cutaneous System.....	Vitiligo, urticaria.
		Pigmentation.
		Hyperidrosis.
		Flushings and sensation of heat.
		Vigoroux's sign.
	Of the Urinary Tract..	Polyuria.
		Albuminuria.
		Glycosuria.
	Of the Genital Organs.	Menstrual disturbances.
		Impotence.
	Of Diverse Origin....	Anemia.
		Edema.
		Cachexia.
		Giving way of legs.

These are the primary or cardinal and concomitant symptoms, and from their diversity and widespread dissemination show that

the disease is not local or circumscribed, but one affecting several of the great systems of the body.

The cardinal symptoms, as tachycardia goitre and exophthalmus, were for years regarded as characteristic, and the triad always stood for the one disease. Pierre Marie, of Paris, was the first to point out that accompanying these symptoms there was most always present a tremor, resembling closely the tremor of mercurial poisoning, and in recent times this symptom has been looked upon as one of the chief or cardinal symptoms. Of the cardinal symptoms, the tachycardia is the most important, and for months, even years, may be the only evidence of a latent Basedow. The pulse may reach 200 per minute, but, as a rule, varies between 120 to 140 beats, is systolic, soft and small. The precordia, even the whole left side of the chest, will, in pronounced cases, reverberate in consonance with the heart-beats, giving rise to feelings of anxiety, suffocation and distress. As these symptoms continue, becoming more pronounced on exertion and excitement, that *bête noir* "nervousness" will, if not already present, make its presence known and the patient will consult her physician, and receive the information, in nine cases out of ten, that she is suffering from *nervousness*, if she be a working girl or woman; *nervous prostration*, if a society woman, and *neurasthenia*, if belonging to the XX. century or "New Woman" league. She will wander from physician to physician without obtaining relief, and then wonder whether or not doctors are what they are usually cracked up to be. The struma or goitre appears at a later stage than the tachycardia, grows slowly and uniformly, is soft, vascular and pulsating, and is present almost as frequently as the tachycardia. The stethescope reveals a systolic murmur, while palpation with the palm of the hand gives a thrill or purring. Of all the symptoms of this disease, the goitre will be most difficult to recognise in our women patients, unless you are looking especially for it, not because it is so illy defined or diffused, but because of its retreat behind sky-scraping linen collars, collar bands and other paraphernalia with which our lady friends so adroitfully and tastefully decorate their throats. It will not suffice to ask whether the throat is swollen or not; you must yourself with your fingers feel for enlargement of the thyroid, and, having found it, persevere in maintaining the fact, even in spite of the arguments of your patient to the contrary. The exophthalmus is less often present than the struma or tachycardia, is usually bilateral and easily overlooked, partly because of ignorance

of the physician as to the patient's former appearance, and secondly, when not especially well marked, may resemble the "full, open eye" we so delight to see in a woman. Sometimes this symptom is so pronounced that the tendinous insertions of the eye muscles are visible, and in rare cases where the eye was forced out of the socket. The vision and retina remain undisturbed, and where the exophthalmus is not extreme, no pain is experienced by the patient.

The tremor which is now regarded as one of the cardinal symptoms is found present in almost every case, may affect the whole body, or the extremities, or the head and shoulders only. The tremor is of the rapid variety, ranging from eight to ten oscillations per second, increasing in intensity under excitement until it resembles the coarse movements so characteristic of chorea.

These four symptoms, when well developed, leave no doubt in the physician's mind regarding the diagnosis—they are pathognomonic. The secondary, or concomitant, symptoms are less characteristic, and, existing alone without the cardinal symptoms, cannot determine a case.

The digestive disturbances are perhaps the most annoying to the patient, and give the physician the most trouble and best opportunity for reviewing his works on therapeutics. The vomiting is at times uncontrollable, but must not be confounded with the projectile vomiting of brain lesions. It is not of the projectile variety, occurs after meals and attended with considerable nausea. The diarrheas are most distressing, very frequent and sudden, the stools are of watery consistency and very debilitating to the patient.

The respiratory symptoms consist of a hoarse, dry, convulsive cough; dyspnea and frequent respiration, owing, perhaps, as Bryson has recently demonstrated, to a lack of chest expansion during respiration.

The secondary eye symptoms are perhaps the result of the exophthalmus; certain it is that the greater the bulging the more pronounced will be the signs of v. Graefe, Möbius and Stellwag. v. Graefe's sign is the refusal or tardiness of the upper eyelids to follow the eyeball when slowly directed downward. Möbius's sign consists of an insufficiency of convergence, due to some disturbance of the internal recti muscles. If a patient be asked to look at a distant point, then at a near point, one eye will converge while the other diverges.

Stellwag's sign consists of an almost complete absence of the involuntary winking of the lid, and is quite conspicuous, especially since the voluntary movements can be made as well as before. The lids are retracted, the eyes consequently appearing abnormally large, even though there exists but slight protrusion of the bulbs. These disturbances, Graefe's and Stellwag's, are thought to be due to some affection of the small muscles of Müller, which are supplied by the sympathetic nerve. The sensibility of the cornea is diminished, is dry and lusterless, owing to the want of moisture on the ball, the normal quantity of the lachrymal secretion not being sufficient on account of the undue evaporation taking place, because the two lids are so far apart and winking only rarely occurs.

The ophthalmoscope reveals a normal fundus, with the exception of a spontaneous pulsation of the retinal vessels. This phenomenon was first discovered by Becker.

The nervous symptoms proper are the most developed of all and exist at the very earliest moment, as we shall see when we study the *formes frustes*. Nervousness is personified in every look, thought, movement and gesture of the patient. In no other affection of the nervous system is it of so virulent a type, so uncontrollable and so little amenable to treatment as a symptom. It shows itself in various forms, as irritability, distraction, forgetfulness, petulance, snappishness, and transforms an otherwise sweet-tempered person into an irascible, passionate, fretful, choleric and splenetic individual. It is often impossible to obtain information from them, on account of evasive replies, wrong interpretation of the questions and inability of the patient to remember his past feelings. Sometimes psychical disturbances supervene, as mania, melancholia and hallucinatory insanity, and in such cases the prognosis is most grave. The almost universal presence of the nervous condition should put a physician on his guard, and when, after a course of treatment of a "nervous body," no beneficial results are obtained, to conclude that the case is not simply nervousness, but that he has some deeper-seated affection on his hands.

The cutaneous symptoms include obstinate urticaria, vitiligo, dirty discolorations of the skin, pigmentation, covering the entire body or only localised. I saw a case in Westphal's clinic of this disease, where the skin was of the dirty bronze color, and in reality turned out to be Addison's disease, combined with exophthalmic goitre. The hair turns gray prematurely, falls out rapidly and is

dry and brittle. The patient is greatly discomforted by profuse perspiration, either affecting the whole body, or the hands, head, or feet only. This hyperidrosis sometimes affects one side of the body only, and is at times most pronounced during sleep. This saturation of the skin is thought to be the cause of another quite characteristic symptom, discovered by Vigoroux at the Salpêtrière, in Paris — namely, that the electro-motive resistance of the skin was much less in patients affected with exophthalmic goitre than in healthy individuals. For instance, the electro-motive force of one Leclanché cell might register one milliampère on the galvanometer, while in a case of exophthalmic goitre it would register two to five milliampères.

Polyuria, albuminuria and glycosuria are frequently observed, attended with great thirst and feeling of intense heat. Disturbances of menstruation, as dysmenorrhea and amenorrhea are often noted in the female, while in the male, sexual impotence sometimes develops. Cachexia, often with rise of temperature, is present in many cases, giving rise to feelings of heat, and on the least exertion, mental or physical, the patient is bathed in perspiration. The cachexia, with increase of bodily temperature, resembles very much an ordinary febrile affection, but differs from a true fever in that the urine is free from those qualities and constituents which characterise the febrile state.

Local edemas affecting the lower extremities, eyelids or other unusual parts of the body, have been frequently reported, they being of nervous origin. In very severe cases there may develop anasarca, the result of heart weakness, leading to an unfavorable termination. Other symptoms have from time to time been noted by observers, but as they are met with so rarely I will not detain you with their enumeration.

Trousseau, the great French clinician, in studying many of these cases of exophthalmic goitre, found that a large percentage did not reach full development or, in other words, did not show the three cardinal symptoms unfolded to the same degree or intensity. He found that in some patients certain symptoms would be well marked, while others would be hardly perceptible or even absent, and yet he called such cases genuine.

This was contrary to the teaching in vogue up to that time, which insisted upon the undoubted presence of the goitre, tachycardia and exophthalmus. Trousseau accordingly proposed the term, *formes frustes*, meaning "abortive cases," for all such as

were faulty in one or more of the cardinal symptoms, and as these cases are more thoroughly studied they are found to exist in relatively large numbers. Marie, under the guidance of the great Charcot, took up this subject a few years ago and found that many cases of so-called simple nervousness were, in fact, nothing less than the *formes frustes* of Trousseau. His studies awakened renewed interest, and as a result the *formes frustes* are more properly diagnosticated than ever before.

In these abortive forms there were generally recognised two prominent symptoms, to which was often added the third. The patients complained of nervous excitability and unstability, with a very rapidly pulsating heart or continuous palpitation. Insomnia and a nervous dyspepsia, along with the usual nervous accidents, misled physicians and do even to this day. Up to Marie's time the tremor had not been observed, but he recognised it in nearly all cases, and this has received universal recognition. This syndrome, nervousness, tachycardia and tremor, was found most often in the *formes frustes*, but other combinations are equally entitled to the same designation. In fact, any combination having one or more of the cardinal symptoms associated with one or more of the digestive, respiratory, ocular, secretory or genito-urinary symptoms, may very properly be designated *formes frustes*, and these forms the physician needs bear in mind. These cases are amenable to proper treatment as we shall see, and do not belong to that class of nervous affections, which physicians generally recommend any and all kinds of treatment, shifting from one drug or therapeutic measure to another until the patience and purse of the sufferer are taxed to the utmost.

Pathology.—This disease has, if observers can be believed, almost as many pathologies as symptoms, but I shall only discuss three of these theories today. Perhaps the most probable of these three possible theories of the pathogenesis of exophthalmic goitre is the one advanced by Köbens, and defended by Trousseau, Eulenburg, Oppenheim and many others, that it is due to some affection of the sympathetic nervous system. Certainly the majority of the symptoms are traceable to some lesion of this system, notably the tachycardia, perhaps the exophthalmus and goitre, the vasomotor, the secretory disturbances and other symptoms. Some are the result of irritation along the sympathetic, while others are due to paralysis of the sympathetic. My own view coincides with this theory, and until some more plausible theory is

advocated I shall consider exophthalmic goitre as a disease of the sympathetic nervous system.

The second theory, supported by Sattler, Putnam, Mendel, Filehne and others, place the focal lesion in the medulla, more especially implicating the nucleus of the vagus nerve. Filehne, by transecting the corpora restiforme in animals, produced many of the symptoms of Graves' disease. Dardufi and Bienfait attained the same result. Hirt is inclined to accept this theory and places the chapter on this affection in the list of diseases of the vagus nerve. Another theory advocated by Möbius, and which has enlisted many supporters, especially during the past few years, is that it is the result of an abnormal activity of the thyroid gland, which, being absorbed by the system, produces toxic effects. This theory has had the effect of calling the surgeon to our help and removing the thyroid gland. Buschan collected 98 cases of thyroidectomy in this disease, with only 16 cures, while 14 per cent. of those operated upon died. Buschan, who has done excellent work in this field, believes it to be a functional disturbance of the whole nervous system, especially of the cerebro-spinal centers.

Treatment.—The treatment is as varied as are the theories regarding its pathology. What has not been given can scarcely be found in the pharmacopeia. My treatment of these cases has been very satisfactory, and I can unhesitatingly recommend it. Of course, the usual advice about excesses in eating, drinking and venery must be given. The avoidance of all excitement and emotional outbreaks, and a careful regard for the general health must be insisted upon.

The systematic use of the galvanic current is the most important element of treatment. The current should be weak, from ½ to 1½ milliampères, applied for a short time (one to three minutes) every other day. The cathode is applied at the angle of the lower jaw, first on one side and then on the other, while the anode is applied at the back of the neck. After ten to fifteen treatments a steadily progressing improvement is noted, which may last for years. This plan is recommended by such authorities as Erb, Benedict, Moritz Meyer and many others. The medicinal agents comprise, in first order, the slowly-increasing use of strophanthus, beginning with one drop of the tincture twice daily and increasing to ten. It is especially indicated where the tachycardia is well-pronounced. Ferguson, of Troy, has had uniformly good results with this drug, and has observed no relapses. Recognising tachy-

cardia as an early symptom, he has been able to forestall the blossoming out of the disease through the use of strophanthus. Many of the ablest neurologists, as Gray, Gowers, Strümpell, Hirt and Seeligmüller, make no reference to it in describing the treatment of this disease, while Hammond, Oppenheim, Corning, Thompson and others rely upon strophanthus for controlling at least the tachycardia. As a tonic I know of nothing better, not only in this disease but in every disease of the nervous system, than the old-fashioned codliver oil. We have seen fortunes amassed by shrewd advertisers of proprietary medicines, the majority being tonics, have done our share to increase their profits, and yet at our very doors have in codliver oil a tonic, one tablespoonful of which is worth more than a pint of the ordinarily advertised nerve tonics. Drown your patients in the oil, nothing so restores a starving nerve-fiber or nerve-cell. For the insomnia, trional has done me yeoman service, and has never disappointed me, 5 to 10-grain powders producing a refreshing, healthful sleep.

Bromides for quieting temporarily the increased nerve activity, nux vomica and phosphoric acid for dyspeptic phenomena have given satisfaction.

The drinking of several pints of pure spring or distilled aerated water daily and a diet of nitrogenous foods mostly are important adjuncts of treatment.

Of late the administration of thyroid extract has attracted considerable attention, and many cases of improvement and recovery are on record. Personally I have not had any experience with this agent, but have seen cases and known of cases that have been benefited. Should I ever fail to attain results with the treatment laid down, I shall unhesitatingly try thyroid extract.

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Clinical Report.

PLACENTA PREVIA.[1]

BY WM. STANTON, M.D., Varysburg, N. Y.

CASE I.—*Placenta previa partialis.* Mrs. G. P., aged 20. About thirty-eight weeks advanced in first pregnancy. Was called at 4 A. M., June 13, 1895, to attend her in labor. Found she had had dragging pains all the previous day and night, which had become

1. Three cases given in connection with a paper read before the Wyoming County Medical Association, January 14, 1896.

nearly constant; no hemorrhage. Not being suspicious of any complication, a simple digital examination revealed a soft, patulous os. Could have easily introduced one or two fingers, but did not, a vertex presentation being evident. I gave her 4 gr. quinine and went home to breakfast. Calling about 7.30 A.M., found her easy, only having occasional light pains. She was about the house and quite comfortable most of the day.

In the evening the pains increased and slight hemorrhage began. Having made no examination since early morning I now passed the index finger through the os, and, to my surprise, came upon the placenta, covering the fetal head. On the right side it was still firmly attached, but on the left it was partly loosened. Carefully passing the finger high up, I could just reach the margin of the placenta. I now gave a full dose of ergot, informed her husband of the condition and by questioning obtained history of two hemorrhages,—one at about the twenty-sixth week, lasting two or three days; the second, about four weeks later. Being able to reach an edge of the placenta and having a vertex presentation, I determined, if possible, to secure a vertex delivery. Strong pains soon followed, and hemorrhage increasing, I loosened the placentaas far as possible and ruptured the membranes. With the right hand securing dilatation and pushing the placenta to one side, while with the left I used Kristeller's expression, the engagement of the head was soon accomplished, when all hemorrhage ceased. She made but little progress, however, the placenta becoming an obstruction. I therefore administered chloroform and delivered with forceps, immediately removing the placenta and firmly grasping the uterus through the abdominal walls, controlled the hemorrhage. Mother and child both did well.

CASE II.—*Placenta previa centralis.* Mrs. J. A., aged 42. Sixth pregnancy; at term. Previous gestations normal. No history of hemorrhage. Had suffered greatly during the later months from extreme soreness in the lower part of the abdomen, groins and pelvis; felt more when standing and rendering locomotion almost impossible.

Was called just before dark, August 8, 1895, four miles in the country. Upon my arrival all pains had ceased for the first time in thirty-six hours. Examination revealed a patulous os, which gave but little resistance to the introduction of the index finger, when I came upon a smooth, boggy substance, feeling exactly like the fetal surface of a normal placenta; still the membranes had not ruptured and there had been no hemorrhage.

Vertex presentation was evident, the patient quite easy and likely to secure a few hours' rest. I therefore decided to remain and watch developments. After a few hours of occasional pains, a second examination was made and with some difficulty two fingers introduced within

the os, when I found the margin of the membrane over the placenta firmly adherent all around at some 4 to 6 centimeters from the mouth. The administration of ergot secured strong and regular pains, and dilatation sufficient to easily allow the introduction of three fingers was secured, with absolutely no hemorrhage. I now determined to loosen the placenta and reach an edge, if possible. Having failed to perform version by external manipulation, the pelvis being fairly roomy and contractions good, I decided to attempt a vertex delivery. Considerable difficulty was met in loosening the edge of the membrane and it was quite painful to the patient. After loosening the placenta as far as possible, I could not reach the edge at any place. I therefore tore through and thus ruptured the membranes. The liquor escaped with a gush, and a strong pain, aided by Kristeller's expression, immediately pressed the head down, sufficient to check hemorrhage. The placenta here, as in Case I., became an obstruction, and delivery was completed in the same manner. After delivery the membranes were found entire, the only opening being through the placenta, which was very large, of medium thickness and had on its maternal surface, almost exactly in the center, a patch of membrane, about 6 centimeters in diameter, similar to that covering the fetal side and very tough. Mother and child both did well.

CASE III. Mrs. J. W., aged 32. About seventeen or eighteen weeks advanced in third pregnancy. Previous pregnancies normal.

Was called about 2 A.M., December 4, 1895, and obtained the following history: She had supposed herself pregnant until seven weeks previous, when she began to flow and continued to do so almost constantly until the previous evening, when pains began and flowing increased so much as to cause alarm. I found her flowing badly and having strong pains. A digital examination revealed a pregnant uterus, patulous os and the placenta squarely planted over the os. I was able to almost completely loosen the placenta by sweeping the finger around within the os. Hemorrhage ceased at once and she was soon delivered without any further difficulty, the placenta being expelled first. Recovery was good and uneventful.

TUBERCULOSIS AND GENITAL INFECTION.—Dobroklonsky, (*Med. Standard,*) from careful experiments (Vratch) concludes that tubercular infections may be conveyed through the genital apparatus from man to woman and vice versa, but only when there are present in these organs tubercular foci, a condition rarely met with. This method of infection in comparison to others is but of secondary importance, however, as local tubercular process in the genital apparatus, either in the male or female, may take such a course as not to cause general infection or threaten life, and may even be latent, existing without the knowledge of the patient himself.

Progress in Medical Science.

OPHTHALMOLOGY AND OTOLOGY.

CONDUCTED BY ALVIN A. HUBBELL, M. D., Buffalo, N. Y.,
Professor of ophthalmology and otology in the Medical Department of Niagara University.

HYDROZONE IN PURULENT OTITIS MEDIA.

BOTELER, Kansas City, (*Medical Bulletin*, February, 1896,) reports a case in which the patient, aged 24 years, laborer, complained for about four weeks of intense pain in his left ear, so severe at times that he apparently lost consciousness. The man's face was deformed; an edematous swelling, the size of a baker's half-loaf, occupied the usual location of the ear; auricle almost buried in edematous tissue; intensely tender; integument and subcutaneous tissues were thoroughly infiltrated; ichorous, fetid pus exuded from an almost imperceptible meatus; patient chilly and showed signs of septic infection; indications pointed to suppuration of the mastoid cells. Treatment consisted of heroic doses of elixir of the six-iodides internally; small Eustachian catheter was introduced into the external meatus, rubber syringe attached and through this half an ounce of hydrozone was injected four times a day. Patient was confined in bed and hot fomentations applied. In twenty-four hours the intensity of the odor, amount of the discharge and size of the swelling were materially reduced. Hydrozone then was injected through a larger catheter every hour, which was continued for a week. At the end of eight days the swelling had entirely disappeared, when an examination disclosed a circular perforation of the ear drum, proving the case to have been one of purulent otitis media with systemic septic infection. Two incisions were made to permit the escape of pus from the integument; the mastoid was not involved. The rapidity with which the disease yielded after the introduction of hydrozone seemed remarkable.

TREATMENT OF GRANULAR OPHTHALMIA AND SOME OTHER AFFECTIONS BY APPLICATION OF IODINE IN LIQUID VASELINE.

DR. E. A. NEZNAMOW, privat-docent of ophthalmology at the medical faculty of Kharkow, has employed a new method of treatment in trachoma, from which remarkably good results appear to be obtained. This treatment consists in applying twice a day to

the mucous membrane of the everted eyelid a solution of pure iodine in liquid vaseline. The applications are made with a brush or small cotton swab steeped in the solution, the strength of which varies according to the particular form of the affection in each case. In the chronic, cicatricial varieties of granular ophthalmia, complicated by pannus, infiltration, ulceration and superficial opacities of the cornea, Dr. Neznamow employs liquid vaseline containing from ½ to 1 per cent. of iodine. By this means marked improvement is obtained within three or four days; in two or three weeks the vessels of the pannus become obliterated, the exudations are absorbed, the cornea recovers its transparency, the palpebral mucosa becomes smooth and soft, and as a result thereof sight is improved.

The so-called pannus cornosus or crossus is said to yield with surprising rapidity to applications of liquid vaseline containing 1.5 per cent of iodine. In the case, for instance, of a patient in whom two-thirds of the cornea were covered by a pannus, at least half a millimeter in thickness, the left eye, after three weeks' treatment, presented no abnormal symptoms, except slight superficial opacity of the cornea, while the pannus, which remained in the right eye, was insignificant.

In recent granular and papillary pannus it is necessary, in order to obtain the desired result, to increase the quantity of iodine in the solution to 3 or even 5 per cent. Liquid vaseline, however, does not dissolve more than 1.5 per cent. of this substance, and it must therefore be mixed with a little sulphuric ether, or, better still, rectified petroleum, in sufficient quantity to insure the required concentration of the solution.

Applications of these strong solutions to the palpebral conjunctiva, as a rule, determine rather intense phenomena of reaction. The mucosa assumes a red tint, more or less profuse lachrymation supervenes, and the patient experiences a smarting pain, which, however, speedily subsides. After four or five applications, a catarrhal state is induced, with copious secretion, congestion and a slight swelling of the mucosa. At this stage of the treatment, Dr. Naznamow, while continuing the iodine applications two or three times daily, slightly cauterises the conjunctiva now and then with a 2 per cent. silver nitrate solution, followed immediately by irrigation of the eye. In addition, the largest granulations are incised, and their contents squeezed out. By these means the granulation becomes absorbed within a fortnight or three weeks.

In cases of recent trachoma, in which the secretion is profuse from the onset, it is advisable, before resorting to the use of strong iodine solutions, to make a few applications of glycerine containing 5 per cent of iodine, in order to check the hypersecretion of the palpebral conjunctiva.

The excellent effects of the treatment introduced by Dr. Neznamow have been confirmed by Dr. L. L. Hirschmann, professor of ophthalmology at the faculty of Kharkow, who has found that iodised liquid vaseline may be employed with advantage, not only in granular ophthalmia, but also in certain other ocular affections. Thus old-standing ciliary blepharitis is said to rapidly improve under application to the edge of the eyelids of a ½ or 1 per cent. solution of iodine in liquid vaseline.

Instillation into the conjunctival cul-de-sac of a few drops of the same solution are also said to give very good results in cases of dacryo-cystitis.

Lastly, persistent infiltration following parenchymatous peratitis is said to be rapidly absorbed under the influence of applications to the palpebral conjunctiva of 2, 3 or 5 per cent. iodised vaseline. Solutions of iodine in liquid vaseline, obtained by the addition of sulphuric ether or petroleum, should be kept in tinted, well-stoppered vials, so as to exclude air and light. They remain clear for about a week, after which they become cloudy and unfit for use.—*The Medical Week*, Dec. 27, 1895.

THE TREATMENT OF WOUNDS OF THE CORNEA BY CONJUNCTIVAL OCCLUSION.

Dr. de Wecker, Paris, says the employment of a conjunctival flap in wounds or incisions of the cornea and sclera, as advocated by Snellen, is easily applicable when the wound is in the sclera at some little distance from the cornea; less available when the wound is close to or at the corneal margin. In cases in which the wound is in the central part of the cornea, the difficulty of covering and keeping it covered by a conjunctival flap is considerable. Even if two flaps be made on opposite sides of the cornea and joined medially by sutures, the traction is sufficient to make the stitches cut their way out before the conjunctiva can have become united to the wound or the wound have healed beneath the con junctiva.

The writer thinks he has found a means of coping successfully with this difficulty by making, temporarily, a complete conjunctival

covering to the cornea. He employs this proceeding only in cases of large wounds reaching to or extending beyond the corneal limbus and showing a tendency to gape more or less widely. The method recommended is as follows: The conjunctiva and subconjunctival tissue are carefully divided all around and close to the margin of the cornea. The conjunctiva is then separated from the deeper tissues almost as far as the insertion of the recti muscles, and when thus freed from its attachments is drawn over the cornea and stitched, either by a continuous suture, which brings the cut margins together, like the drawing-string at the mouth of a bag, or by four or six separate sutures. Care should be taken that the stitches are passed through the subconjunctival tissue, in order that they may not cut out prematurely. The cornea is thus covered in its entirety by conjunctiva. The edges of the eyelids and the cilia having been carefully cleansed, a dressing and bandage are applied and allowed to remain undisturbed for eight or ten days, until the suture threads have become spontaneously detached.

In the author's experience there has been no case in which the adhesion of the conjunctiva to the cornea was more extensive than was desirable. It has always left unaffected the part of the cornea which had not been wounded, its adhesion to the cornea being limited to a narrow area adjoining the lips of the wound.

By this treatment de Wecker maintains that it is possible to save eyes which have sustained very large wounds of the cornea, if the operation is performed (under general anesthesia) very soon after the accident; time should not be taken to deal with deeper lesions, such as wound or dislocation of the lens, which can be better treated after the subconjunctival healing of the corneal wound has taken place.

The operation, the writer adds, is very easily performed and leaves no visible scar.—*Annales d' Oculistique*, November, 1894, and *Ophthalmic Review*, February, 1895.

THE OPERATIVE TREATMENT OF IMMATURE, AND SOME FORMS OF ZONULAR, CATARACT.

Dr. John E. Weeks, of New York, at a meeting of the American Medical Association, 1895, read a paper on the operative treatment of immature, and some forms of zonular, cataract, in which he stated that the most favorable time for the removal of cataract

was at the period when the lens fibers had been separated fro m the lens capsule, by the formation of liquor Morgagni between them. A stage of swelling was spoken of as existing in the formation of soft and of rapidly-developing senile cataract, but was said not to exist in the cases of nuclear cataract and of sclerosed lens. Swollen lens fibers were not found to be easily detachable from the lens capsule. In many cases in the formation of ordinary senile cataract, vision may become reduced to 20-100 or less, at which point it may remain for a long period of time. This stage is distressing to the individual, as it renders him unable to perform the ordinary duties of life, and may entail hardships on the patient or patient's family.

The author's experience in the removal of noncataractous lenses at the dead-house led him to believe that all cataractous lenses occurring in individuals twenty-five or more years of age, could be removed with comparative safety as soon as the opacity had progressed sufficiently far to interfere with useful vision.

Förster's operation for the ripening of immature cataract was tried a number of times, but was abandoned, as it was found that the lens cortex, although opaque, was still somewhat adherent to the capsule, and the removal of the cataract, after Förster's operation, was attended with as much difficulty as was experienced in removal without this operation. It also carried with it the chances of the inflammation and bad results incident to the additional operation.

The operation attempted by the author of the paper, in all uncomplicated cases, was simple extraction. As much cortical substance as possible was removed by external manipulation.

Lavage was seldom resorted to. If a small amount of lens cortex remained in the eye, it becomes absorbed and produces no inflammatory trouble. The author has never seen inflammatory conditions awakened by the presence of cortical substance in the eye, after removal of immature cataract.

Twenty-five cases of extraction were reported, divided as follows: Immature, soft cataract, 3; zonular cataract, 5; immature, complicated cataract, 4; immature, diabetic cataract, 1; immature, senile uncomplicated, 12. There were no losses. Iridectomy was done in six cases, simple extraction in 19 cases.

There was one prolapse of iris. Dissection of secondary cataract was done in 20 cases. The ultimate results were: 20-20, or better, 13 cases; 20-30, 2; 20-40, 3; 20-50, 2; 27-70, 5.

The results appeared to the author to be as favorable as those obtained by the removal of cataract at the stage of maturity and the relief to the patients by quick restoration of vision was very great. Such operations should be done by expert operators only.—*The Ophthalmic Record*, July, 1895.

NERVOUS DISEASES AND INSANITY.

CONDUCTED BY JAMES WRIGHT PUTNAM, M.D.,
Clinical professor of diseases of the nervous system, Buffalo University Medical College,
and WILLIAM C. KRAUSS, M.D.,
Professor of nervous diseases in Niagara University Medical College.

GONORRHEAL PSYCHOSES.

PROF. S. VENTURI (*Hospitals-Tidende*, No. 42, 1894, quoted in *Lancet-Clinic*,) calls attention to the relation between gonorrhea and certain abnormal mental conditions. Among twenty-two patients with hebephrenia, in his institution, there were twelve with a gonorrheal discharge, and, in contrast, with true hebephrenia the disease was cured in four to eight months, a shorter or longer time after the cure of the gonorrhea. The disease would appear one to six months after infection and be characterised by stupor, with anxious hallucinations, intermittent delirium and attempts at suicide, insomnia, general hyperesthesia and augmented cutaneous reflexes. No fever. In occasional cases there were cataleptic and catatonic states, choreiform movements and maniacal excitement of longer or shorter duration. He assumes an infection of the meninges by the gonococcus. Balsamics are indicated in its treatment.

ACUTE NONSUPPURATIVE ENCEPHALITIS.

OPPENHEIM (*Centralbl. f. klin. Med.*; quoted in *Medical Review*,) says the separation of the nonsuppurative from the suppurative disease is most important. The etiology of the hemorrhagic form of the disease is not always the same. By some it has been attributed to alcohol, by others to influenza and there are a number of cases of no known etiology. It begins with severe symptoms, but usually runs a favorable course. He gives short details of five cases observed by him, all of which recovered. Three cases were acute, occurring respectively in girls aged 16 and 10 and in a young woman. In two subacute cases, in a girl aged 12 and a man aged

21, the lesion lay in the floor of the fourth ventricle (Wernicke's type), and a complete ophthalmoplegia developed itself. In none of these cases was there any evidence of syphilis. In the literature of this disease the prognosis has not always been looked upon as very favorable, but in recent writings recoveries have been noted. His experience has been most favorable. Polioencephalitis must be distinguished from disseminated sclerosis and which, according to him, may end in complete recovery. Acute course, rapid development, high temperature and the like, are unfavorable signs, whereas low temperature and a protracted course make the outlook favorable.—*British Medical Journal.*

CLAIMED TEST FOR INSANITY.

Dr. Burton Ward declares (*Medical Age*) there is one infallible symptom indicating whether one is sane or not. Let a person speak ever so rationally and act ever so sedately, if his or her thumbs remain inactive there is no doubt of insanity. Lunatics seldom make use of their thumbs when writing, drawing or saluting.

THE SPINAL CORD.

Irritation of the spinal cord (*Medical Age*) increases secretion. Congestion of the lumbar plexus or of the cord will cause diabetes; a little lower down, diarrhea. Congestion of the cervical plexus causes vomiting and palpitation.

INSANITY AND MURDER.

The Supreme Court of the United States has (*Medical Record*) just handed down a decision which is of much importance in cases involving a question of the insanity of murderers. The court has reversed the decision of the inferior court and lays down the principle that the burden of proof of guilt rests in all criminal cases upon the prosecution ; in other words, the prosecuting attorney, in cases where the claim of insanity is put up, must prove that the accused is not insane.

IDIOTS' SKULLS.

Sir George Humphrey reports (*Medical Age*), after examining nineteen specimens of idiots' skulls, that he is unable to find any

thing suggesting that deficiency in development is the leading feature in the deformity, or that the smallness of the bony cerebral envelope exerts a depressing or dwarfing influence upon the brain—nothing, in fact, to encourage the practice recently advocated of removing part of the calvarium with an idea of affording more space and freedom for the growth of the brain.

ALTERATIONS OF THE SPINAL CORD IN PERNICIOUS ANEMIA.

In an inaugural dissertation (Stockholm, 1895, Eklund, *Univ. Med. Journal*,) Charles Petren states that in pernicious anemia small hemorrhages and consecutive sclerosis are frequently met with in the spinal marrow. These hemorrhages have no significance from a clinical point of view. The vessels often show thickening and commencing hyaline degeneration, not, however, as a rule, combined with degeneration of the nervous elements. From a study of the literature it appears that comparatively few cases of pernicious anemia present a real disease of the spinal cord. The symptoms of anemia remain unchanged in cases in which it does occur, and it is difficult to explain why the cord should be affected in some cases and not in others. The disease of the cord manifests itself with somewhat varying symptoms, certain of which, however, are exhibited in all cases. From an anatomical point of view, the alterations have considerable variations, but this is accounted for to a great extent by the fact that the process has been observed at a different stage in the various cases; from a closer analysis of the cases it appears that the degeneration progresses in a fairly regular manner. It is presumable that these cases of disease of the spinal cord form a special group, even from a neurological point of view. It may be admitted that some toxic condition is the common, immediate cause of the disease of the spinal marrow as well as of the anemia. The alterations of the spinal cord are here wholly different from those found in tuberculosis and diabetes, where the changes can be easily distinguished by slightly-marked and chronic degeneration, such as is often found in Addison's disease.

EPILEPTIFORM INEBRIETY.

Dr. T. D. Crothers, (*Lancet-Clinic*,) in describing the paroxysmal outbreaks of the inebriate and his innocence or guilt in certain criminal cases, gives the following conclusions in determining the facts of the case :

1. The periodicity of the drink attacks.

2. The mental conditions which preceded or followed them.

3. The character and conduct of the case in the free interval for purposes of comparison.

4. The act in question and the time and condition of the man when it was committed.

5. The facts of heredity and his probable degree of mental vigor and health, together with his present state of mind and body.

A study of these facts will most naturally bring out a clear conception of the mental condition of the man and his degree of sanity and soundness, with consciousness of the act and power of control at the time.

THE ALLEGED REFLEX CAUSES OF NERVOUS DISEASE.

PHILIP COOMBS KNAPP (*Am. Med.-Sur. Bull.*) arrives at the following conclusions:

1. The essential feature in the production of many neuroses is the neuropathic state, degeneracy, of the subject.

2. In hysterical subjects, suggestion plays an important part, both in the development and cure of the symptoms.

3. Disease of any organ may give rise to referred pain in some definite area, but not to other nervous disturbances, except as a secondary result of local diseases of the organ. This local disease manifests itself by the ordinary local symptoms and the nervous phenomena are due to exhaustion, anemia, intoxication, and the like.

4. In a few rare cases, injury of a sensory nerve may give rise to epileptiform seizures.

5. Surgical operations for the relief of nervous symptoms should never be performed unless there are clear indications, apart from such symptoms, for an operation.

PUBLIC HEALTH, SANITATION AND VITAL STATISTICS.

BY FRANKLIN C. GRAM, M. D., Buffalo, N. Y.,
Registrar of vital statistics, Department of Health.

IT MAY not be uninteresting to physicians to know that despite the ever-increasing population of Buffalo the death-rate continues steadily to decrease. Not only is this the case with the rate, but also in the actual number of deaths. This fact has undoubt-

edly manifested itself to most practitioners when they made a comparison between their present and past book accounts, and no small number have made investigations as to the cause. It is often as important to know why a patient recovered as it is to know why another one died ; and so, in this case, it may be of as much interest to know the reason for the exceptional healthfulness enjoyed by our city as it would be to determine the cause and source of an epidemic.

Sanitarians in various parts of this country have been attracted by the published official reports and Health Commissioner Wende has received inquiries asking him to explain this "unprecedented death-rate," as one of the correspondents tersely put it.

Briefly stated, a synopsis for the past five years shows the following :

Year.	Deaths.	Rate.
1891	6,001	23.48
1892	5,697	19.98
1893	5,711	19.03
1894	5,280	16.76
1895	4,684	13.95

In 1891 the city's population was 255,664 and according to the police census it was 335,709 in 1895.

Undoubtedly the cause of this great reduction in the number of deaths is mainly due to the decrease in communicable diseases, including consumption, the percentage of deaths in these having decreased from 7.42 in 1891 to 4.04 in 1895.

The Health Department is frequently criticised as being unnecessarily severe in its vigilance over contagious diseases, in looking after the sanitary conditions of dwellings, or in preventing the intermingling of unhealthy or exposed children or adults with healthy persons in schools, places of business or elsewhere. Extraordinary as it may seem, not a few physicians have been among this class of critics, and one of their arguments advanced is that in former years there were fewer contagious diseases although the public had comparatively little or no protection from them. Such arguments do not hold good, however, as the public records show an entirely opposite state of affairs.

Consumption is and will remain the principal cause of death so long as the public declines to be educated to the proper methods which may be employed for its prevention. Gradually physicians are beginning to be more prompt in reporting their cases of tuber-

culosis, and more are constantly availing themselves of the opportunity to have examinations of sputa made without charge by the Health Department, but it is remarkable to see the number who request that the patient be kept in ignorance of the true nature of the disease and that the circular of instruction be given to the physician for delivery to the family.

Thus far the present year looks very encouraging, as will be seen by the following comparison with last year of the number of deaths and a few of the principal diseases:

Year.	Month.	Deaths.	Rate.	Under five years.	Consumption, reported.	Consumption, deaths.	Diphtheria, reported.	Diphtheria, deaths.	Diph. Croup, reported.	Diph. Croup, deaths.	Membr. Croup, reported	Membr. Croup, deaths	Scarlet Fever, reported.	Scarlet Fever, deaths.	Typhoid Fever, reported.	Typhoid Fever, deaths.
1896	January.....	327	11.68	98	28	38	—	16	6	6	18	16	26	—	19	5
1895	January.....	372	14.17	149	—	44	80	25	4	4	4	3	78	2	24	5
1896	February.....	297	10 61	84	38	43	—	7	3	3	10	8	21	2	16	3
1895	February. ...	409	15.58	149	—	40	55	13	—	—	2	2	58	3	17	3
1896	March	324	11.58	96	45	40	—	12	2	2	7	7	41	2	20	4
1895	March	416	15.84	151	—	36	59	8	2	2	8	7	37	2	4	6

OBSTETRICS, GYNECOLOGY AND PELVIC SURGERY.

CONDUCTED BY WILLIAM WARREN POTTER, M.D., Buffalo, N. Y.,
Examiner in obstetrics, New York State Medical Examining and Licensing Board.

GONORRHEA IN THE FEMALE.

TAYLOR (*Charlotte Medical Journal*, quoted in *Medical Age*,) says that gonorrhea in women, as in men, consists of an exudative inflammation of the submucous connective tissue, and the genital organs of women are so extensive, complex and involuted, and so profusely supplied by blood-vessels, which frequently undergo normal engorgement, that it can readily be understood why the morbid process may show a tendency to become chronic and lurk and hide. There has been a proneness developed within the past ten years to refer, in a loose and unscientific manner, all female ailments to gonorrhea and attribute to many husbands, who in early days had been indiscreet, a gonorrheal infection of their wives, which produces serious consequences. The extreme and exaggerated views of Noeggerath, who claimed that 800 out of

every 1,000 men living in large cities suffer from gonorrhea, which they have never recovered from, and who, on marrying, sooner or later infect their wives, have done much to perpetuate these ideas. There is a tendency nowadays to harp upon the longevity of the gonococcus, its phenix-like power of resuscitation and its relentless virulence. This idea, put forth by some syphilographers, has had undue weight with many gynecologists, who, under its influence are led to think that the gonococcus in the male and female never dies and is ever ready to produce pelvic mischief. I have seen many young women who have suffered from uterine and pelvic disease after marriage, whose trouble was induced by instrumental manipulation at the hands of energetic young men possessed of an ambition to be known as gynecologists. Minor surgery (Gynecology ?) is certainly the cause of a great many cases of uterine and pelvic disease. In estimating the importance of gonorrheal infection as a cause of female trouble, we must individualise, rather than generalise.

STERILITY.

GRAFE (*Centralbl. für Gynäk.*, No. 49, 1895, quoted in *Medical Record*,) gives the following causes of sterility :

1. Anomalies of the hymen or malformations of the genital tract. A very large vagina can also be a cause of sterility, as the sperma flows out immediately after coitus.
2. Vaginismus.
3. Excessive acid reaction of the vaginal mucus, which destroys the power of motion in the spermatozoa.
4. Narrow external or internal os, anteflexion, retroflexion, endometritis, gonorrhea, especially with involvement of the adnexa, neoplasms.
5. Constitutional diseases, as tuberculosis, syphilis, chlorosis and obesity.

VAGINAL EXTIRPATION OF THE UTERUS AFTER LABOR.

CHROBAK (*Centralbl. für. Gynäk.*, No. 21, 1895, quoted in *Kansas City Medical Record*,) is an advocate of this practice in cases of uncontrollable flooding where rupture is suspected, though he admits that the only two cases in which he acted on this principle died. In one case, a placenta-previa labor, violent hemorrhage set in during delivery and a laceration involving the cervix

was detected. A tampon was applied, but rapidly became soaked, and a second was firmly packed into the uterine cavity. Hemorrhage continuing, Chrobak resolved to remove the uterus through the vagina, as that proceeding seemed to him simpler than hysterectomy from above. The operation was not very difficult. The uterus was nearly six inches long and as it proved difficult of extraction, a piece two finger-breadths wide was cut, like a slice made in an orange, out of the anterior wall. This permitted the organ to be easily withdrawn. There was very little hemorrhage during the removal of the uterus. Complete rupture of its wall was discovered. The laceration had apparently been enlarged when the second tampon was applied. The patient died. There are no details given of the second case. In one case the whole operation was done in four and the other in eight minutes. As far as the facility of extraction is concerned, Chrobak considers his experience encouraging.

For obstinate vomiting during early pregnancy, Dr. Baer (*Phil. Polyclinic*) recommends the following:

℞ Bismuth subnitrate ..... 2 drams.
Saccharated pepsin ..... 1 dram.
Sodium bicarbonate ..... ½ dram.
Sugar of milk ..... 1 dram.

Mix and make twelve powders. One every three hours.

In addition to the above the following prescription will be found to be most pleasing and effective:

℞ Diluted nitrohydrochloric acid ..... 1½ fl. drams.
Spirit of lemon ..... 1 dram.
Simple syrup ..... 2 ounces.

Mix. Give one teaspoonful in a wineglass of ice water three times a day.

STATISTICS OF VAGINAL HYSTERECTOMY FOR UTERINE CARCINOMA. Schmid (*Centralblatt für Gynäkologie*, No. 43, 1895; *Univ. Med. Mag.*,) reports the results of forty-two cases where vaginal hysterectomy was performed for carcinoma. Thirty were carcinoma of the cervix, seven carcinoma of the corpus uteri, and two a carcinomatous degeneration of myoma. Up to 1892 he had operated upon thirty-four cases, with the following results: Seven died through operation, seven are free from return of the disease, twelve have a return, and eight failed to answer his communication.

DIGITAL EXPLORATION IN MIDWIFERY.

CROUZAT, (*Revue Obstetrique Internationale; Univ. Med. Mag.*,) October 21, 1895, disagrees with certain German obstetricians who oppose digital exploration in normal labor and rely upon abdominal palpation. The diagnosis of normality may demand the introduction of the finger into the vagina. Crouzat's principles simplify digital exploration and guard against its dangers. Vaginal examination, he thinks, should be made as rarely as possible. One exploration at the beginning of labor and another immediately after the rupture of the membranes are usually sufficient. It is his practice to make the external parts antiseptic; the hands and forearms are then washed and brushed thoroughly. The nails must receive special attention. The washing is afterward repeated in a 1-1000 bichloride of mercury solution. Great care in the introduction of the forefinger is strongly advocated. This should be dipped in sublimated vaseline and guarded by the thumb and other fingers, whilst the hand is passed under the clothes and near the patient's thighs. On reaching the perineum the labia are parted by the thumb and middle finger. The forefinger is lastly introduced into the vagina without having touched any part of the patient or her clothes since the time it was made aseptic.

THE MANAGEMENT OF MISCARRIAGE.

BARTON (*Med. Bulletin*) says two methods present themselves, one being what is called conservative and the other the active plan of treatment. He discussed the two methods and gave the reasons for his conviction as to which is the better. The two plans, briefly stated, are these: The one is to allow the placenta to remain and come away as best it may and the other is to forcibly remove the afterbirth, completely emptying the uterus of all the secundines. In the first method of treatment a foreign body is left in the uterus which is liable to become septic at any time, and when it does a woman's life is put in jeopardy, or if she escapes with her life, her health is almost sure to be permanently injured. Not only is she in danger of sepsis, but as long as the afterbirth is retained she is in danger of hemorrhage, which may be sufficient to terminate the woman's existence. In France this method is followed to a considerable extent. Tarnier is one who advocates it strongly, claiming that the womb should be allowed time to expel its contents. He points out hospital statistics in which he

saw forty-six cases of retained placenta after abortion and only one death and that from pneumonia; but the death-rate at a hospital in Florence, in which Tarnier's plan of treatment seems to have been carried out, shows a mortality of 6 per cent. Tarnier and Cazeau report a case as follows: "During the first five days the patient did very well, but on the sixth, and at three o'clock in the afternoon, a violent chill came on, which lasted an hour. This unfortunate lady died on the tenth day." All the advocates of this so-called conservative plan of treatment agree that in case there is any indication of sepsis, or even before that, when the lochia becomes offensive, the uterus should be emptied. The only dangers he can conceive of in the active plan of treatment are the introduction of septic material by the physician, which is inexcusable, and the danger of perforation of the uterus by the use of the curette. He is inclined to believe that in many of these cases the curetting did not immediately follow the abortion, but was done to remove a decomposing placenta in a softened uterus. Granting that there have been accidents, the percentage of mortality from this cause is small as compared with the percentage of mortality in retained placenta. In the latter plan of treatment it is not only the death-rate but the injury to health that should count against it. We may have, as a result of a retained afterbirth, septic endometritis and salpingitis, with pyosalpinx; we may have uterine phlebitis; we may have septic phlebitis of one or both legs; we may have septic peritonitis, or septic pneumonia, or septic pleurisy and many other conditions to which the absorption of septic material gives rise. This, together with the danger of a fatal hemorrhage, which is constantly present in a retained placenta, is, when set over against the fact that a few women have lost their lives by the uterus being perforated with the curette in the active or radical method of treatment, it seems sufficient to decide the question in favor of the active method.

HYDROCELE OF THE LABIUM MAJUS.

EDWARDS (*American Journal Obstetrics*) says: A prolongation of peritoneum may reach below the mons veneris through the inguinal ring, covering the round ligament. This peritoneal investment may become adherent above the ring, and a transudation of serum occur into the cavity formed. This condition is then known as hydrocele of the labium majus. He gives several varieties: 1. That in which there exists a patulous canal of Nuck. The fluid is

excreted from the peritoneal surfaces covering the ligament and is free to return within the general peritoneal cavity. 2. The sac may be entirely cut off from the abdominal cavity and dropsy occur in this closed sac. 3. The cellular tissue of the labium majus consists of two layers, which are prolongations of the superficial abdominal fascia. These two layers are considered the analogue of the dartos tunic and between them a serous tumor may form. This is considered by some to be true hydrocele in woman. 4. The substance of the round ligament itself may be the site of a cyst. The gubernaculum of Hunter in the fetus betus becomes the round ligament in the female. This fetal structure is at first hollow and there may be a persistence of this fetal condition which allows the formation of a cyst. Eisenhart has collated forty-eight cases of hydrocele in the female, and finds that twenty-nine were upon the right side and nineteen upon the left. He considers traumatism and congenital defect to be the most frequent causes. Smith believes that the disease is not so rare as is stated; during a period of four years, he says, five cases have been operated upon in the Tottenham hospital. The treatment of hydrocele feminina is operative. Expose the cyst by a linear incision, ligate the neck and enucleate. The wound is to be closed by superimposed layers, as in the closure of hernia. Simple puncture of the hydrocele is of little avail.

ASAFETIDA IN OBSTETRICS.

WARMAN (*British Medical Journal*, quoted in *Md. Med. Jour.*,) finds that this drug is a most valuable therapeutic agent in midwifery. It is a direct sedative to the pregnant uterus and exercises no evil influence over the general system. It is of particular value when abortion is imminent, as it controls uterine irritability. On the other hand, it is of no use as a prophylactic agent in such cases and must not be relied upon when the abortion has proceeded so far as to require manual interference. In habitual constipation and in nervous conditions during pregnancy it is highly beneficial.

COLD BATHING DURING MENSTRUATION.—Cold bathing during menstruation is a beneficial measure, provided women accustom themselves to it by bathing every day for at least eight days before the period. Houzel holds that cold salt-water baths facilitate the menstrual flow, increase the duration of genital life and increase fecundity.—*Depasse, Lancet-Clinic.*

New Instruments.

CERVICAL TRACTOR AND GUIDE, FOR TRACHELORRHAPHY.

By A. H. MACBETH, M. D., Buffalo, N. Y.

THIS instrument is designed to facilitate amputation of cervix and trachelorrhaphy. I have used it several times and find great advantages over other instruments in use. It is simple and easy to manipulate and makes the operation for which it was intended bloodless and saves much time. Very little need be said about the instrument, as the illustration on opposite page is self-explanatory, showing the instrument in several ways, with the workings and way in which it is made. It is 8½ inches in length and 3-16 of an inch in diameter at the distal end.

I will explain briefly its use: One of the lips of the cervix is drawn down with a bullet forceps, the instrument closed and introduced into the cervical canal a sufficient distance for the needles, when extended, to appear in the anterior and posterior fornices or laterally a short distance above the line to which the operator wishes to cut, stopping the needles as soon as the points appear through the cervical tissues. Then a piece of soft elastic tubing or, better, a rubber elastic ring is placed around cervix above the points of the needles, which serve to retain the rubber ring or tubing in place and cut off the circulation; the needles extend by means of a screw in the end of the handle, and can be stopped at any stage of the extension, up to two inches, where they lock, but should pass through the cervix barely sufficient to hold the rubber band in place. If extension of the needles be carried too far, injury might result to the vaginal walls and the like. Now the operator has the uterus and cervix under perfect control, with but one instrument, the handles of which serve as a perfect tractor and the stem as a guide to the cervical canal, which is to be preserved.

With the advantages thus obtained, one can easily see that amputation of the cervix, or trachelorrhaphy, would be very much facilitated.

35 West Eagle Street.

Cervical Tractor & Guide, for bloodless amputation of Cervix, and Trachelorrhaphy.

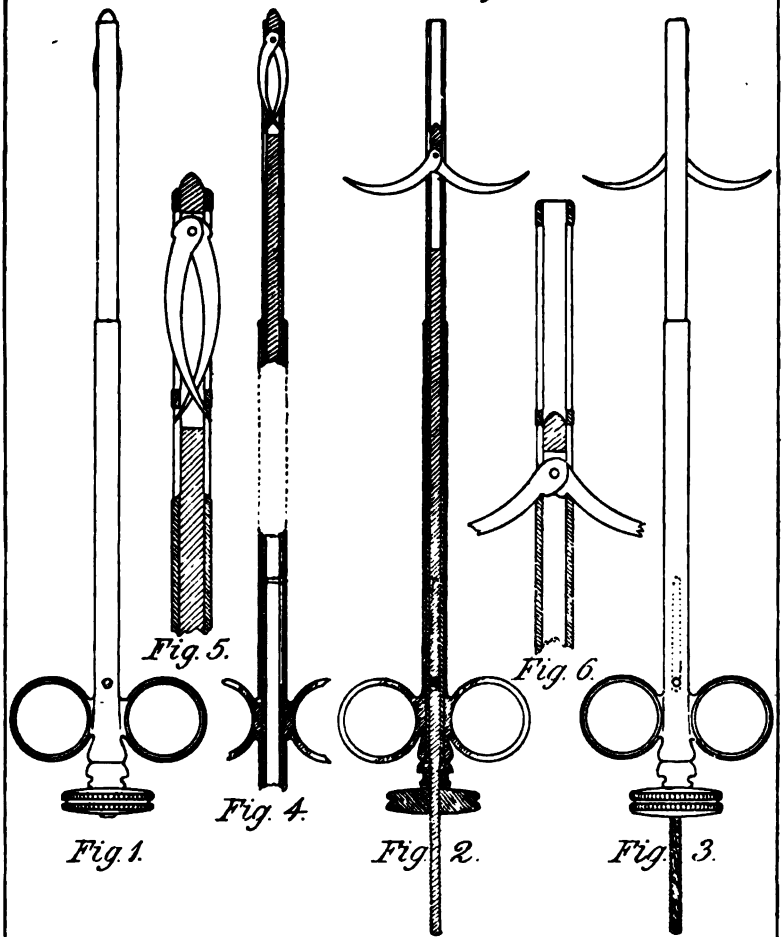

Fig. 1. Instrument closed. Fig. 2. Section with needles extended. Fig. 3. Instrument complete, with needles extended. Fig. 4. Section, with upper and lower half at right angles to each other, showing pin and slot in inner case. Fig. 5. Enlarged section closed. Fig. 6. Enlarged section, showing way in which needles lock and limit extension.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

All communications, whether of a literary or business nature, should be addressed to the managing editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XXXV. MAY, 1896. No. 10.

A WOMAN'S EDITION.

IT AFFORDS us much pleasure to announce to our subscribers and all interested in the welfare of the JOURNAL that our next issue, June, 1896, will be distinctively and absolutely a woman's number. This means that the entire magazine will be the work of woman's brain and hand. The original communications, dealing with several important subjects, will be written by women; the department of progress in medical science will be selected, abstracted and prepared by women; the society proceedings will be reported by women, and the editorial department, including book reviews, personals, literary notes, miscellaneous and news items, all will be the work of women physicians who are eminently fitted for the duties they have kindly undertaken.

The arrangement, proof-reading and general editorial work, too, in all its details, will be carried on by women, so that, as we have before stated, the June issue of the magazine will distinctively represent woman's work in medical literature. We confidently predict that the number in contemplation, not only in the excellence of its material, but in its illustrations and its general make-up, will be one of the most attractive medical magazines ever issued.

It must be borne in mind that such an undertaking is no light task and deserves the most liberal support on all sides; hence we trust our subscribers will manifest an interest in this proposed woman's edition by ordering extra copies with liberality. They will be supplied at 25 cents apiece.

We are not at liberty to disclose the names of the enterprising women physicians who have banded themselves together in this

useful and instructive effort, nor are we permitted to mention the table of contents that is preparing, for we are trying to demonstrate the masculine ability to keep a secret; but the general scheme has been sufficiently unfolded to us to enable us to affirm that the first medical magazine ever conducted in Buffalo by women will be a lasting testimonial to the professional ability of those who are to contribute to its columns.

The idea of a woman's edition was first suggested by a staunch friend of the JOURNAL, who, we are sure, will be much surprised as well as gratified to learn through this announcement, for the first time, that his suggestion has taken material form and is likely to be successfully demonstrated.

MEDICAL DEPARTMENT OF NIAGARA UNIVERSITY.

THIS flourishing medical school closes its thirteenth year on on Tuesday, May 12, 1896. The board of medical examiners of the University will meet at the college building on Ellicott street, at 10 A. M. that day, to examine such candidates for graduation as the medical faculty may present to it. Those which both the faculty and examiners recommend to the trustees as worthy will receive the degree of Doctor of Medicine in the evening, when the commencement exercises will take place at the Star theater. The degrees will be conferred by the chancellor of the University according to the ancient rite of "hooding." Dr. Herman Mynter, of the faculty, will deliver the valedictory to the class, and the Right Rev. Willard F. Mallalieu, bishop of the Methodist Episcopal Church, of Buffalo, will give the charge to the graduates.

During the day, beginning at 10.30 A. M., the Alumni Association will meet, under the presidency of Dr. Joseph J. Kane, of Buffalo. The program will embrace an address of welcome by a member of the faculty, the annual address of the president, and papers by Drs. Sydney A. Dunham, Charles E. Congdon, David L. Redmond and Lawrence G. Hanley, of Buffalo, and Dr. J. S. Peterson, of New York City, all alumni of the university.

The alumni banquet will be held at the Genesee hotel immediately on the conclusion of the commencement exercises.

The medical profession is cordially invited to all these exercises, to which all friends of the college will be given a hearty welcome.

TOPICS OF THE MONTH.

In referring to the typhoid fever epidemic at Elmira in the April issue of the Journal, it was far from our purpose to cast any reflection on the health department of that city, so ably presided over by Dr. Wm. C. Wey. Nevertheless, we fear that a careful reading of our paragraph might lead to a possible construction as of censure. As a matter of fact, we are informed that the Elmira health board did take timely action with reference to the water supply of that city. Through its recommendation a consulting engineer was employed and an elaborate report was made showing the sources of impurity and recommending a remedy; but there was delay in action, a circumstance for which the health board was in no wise responsible, and direful results were the consequence. We understand that the evil complained of has been corrected and that in future there will be no contamination of the water supply of Elmira.

The effects of tuberculosis on dairy cattle has attracted the attention of sanitarians and public health authorities for some time. A committee of the state board of health has conferred with a similar committee of the board of health of the city of New York and a report has been published for distribution among the farmers. The report states that more than one-seventh of all deaths occurring in human beings throughout the civilised world is caused by tuberculosis, and it is estimated that more than one-fourth of all deaths occurring during adult life is due to it and that nearly one-half of the entire population of the world at some time in life acquires it.

The report shows a distinct relation between tuberculosis in the human being and that of the tuberculous cow, and that the milk from infected cows is an active source of the disease. Among stall-fed dairy cows from 5 to 50 per cent. are sometimes found to be affected with the disease. Tuberculous animals are also frequently killed for food. Their flesh sometimes contains the germs, and if not thoroughly cooked is capable of transmitting the disease. Boiling the milk and thoroughly cooking the meat destroy the germs.

The report further shows the prevalence of the disease in this state and it affirms that tuberculosis is now so widespread that it is difficult to prevent the infection of herds even with the best of care. The committee states that destruction is the only proper

mode of disposal of diseased animals, and that their sale for food or their use for milking is not only dishonorable but may become criminal. To suppress the disease the committee suggests the use of tuberculin and the destruction of cattle shown by the test to be diseased. The committee recommends the state to make an immediate appropriation of $300,000 to secure the suppression of the disease.

A DANGEROUS bill has been introduced in the assembly, the purpose of which is to incorporate the Optical Society of the State of New York. This society is not composed of physicians, but of opticians, upon whom it confers the exclusive right to issue licenses to persons whom it designates refracting opticians, giving them the right to fit glasses for various imperfections of vision, a service that none but educated physicians is competent to perform. Last year, in spite of the greatest watchfulness, a bill crept through which conferred medical or surgical rights upon chiropodists, but it is hoped that a similar evil will not happen this year through the apathy of the medical profession. So far we have been fortunate in escaping serious damage through the enactment of unwise medical laws, and it is to be ardently hoped that the last hours of the present legislature will not leave to the medical profession a legacy of unhappy surprises. Least of all should this optical bill be allowed to become a law.

AT A MEETING of the Philadelphia County Medical Society, held April 15, 1896, Drs. John B. Roberts, James C. Wilson and William M. Welch were appointed a committee to urge the members of the American Medical Association to favor the holding of a semicentennial celebration of its organisation. The society also instructed its delegates to invite the association to hold the meeting of 1897, which will be the semicentennial, in the city of Philadelphia. The traditions of Philadelphia, medically, historically and socially, are such as to render it an appropriate city in which to hold the proposed jubilee. We hope our Philadelphia friends of the committee named may be successful in securing the object for which they are earnestly laboring.

DR. ERNEST WENDE, chairman, has issued a call convening the committee appointed by the Medical Society of the County of Erie,

at its seventy-fifth anniversary meeting, to consider the feasibility of establishing a permanent home for the several medical bodies in Erie county. The meeting will be held at the office of the health commissioner, municipal building, Buffalo, Friday, May 1, 1896, at 3 o'clock P. M. An attendance of every member of the committee is urged, as ways and means will be considered, an address formulated and other important subjects connected with the scheme discussed. The committee is constituted as follows: Drs. Ernest Wende, chairman; J. G. Thompson, Angola; Herman Mynter, Buffalo; Henry Lapp, Clarence, and Walter D. Greene, Buffalo.

Personal.

DR. ARTHUR G. BENNETT, of Buffalo, whose practice is limited to diseases of the eye and ear, has removed from 213 Franklin street to 191 Delaware avenue. Hours, 9-1 and 4 P. M.

DR. H. E. HAYD, of Buffalo, has removed from 78 Niagara street to 493 Delaware avenue.

DR. F. G. MOEHLAU, of 1298 Jefferson street, Buffalo, will sail for Europe, May 9, 1896. He will spend four months at the universities of Erlangen and Berlin in study of special departments of medicine, to the practice of which he intends to devote himself in future.

DR. MELANCTHON STORRS has been elected president of the Hartford medical society for the ensuing year. Dr. Storrs is one of the most eminent physicians in New England.

DR. J. H. CARSTENS, of Detroit, read a valuable paper before the Alumni Association of Trinity University, Toronto, Ont., April 7, 1896. He also made an appropriate speech at the annual banquet, held in the evening at the Hotel Rossin. These international exchanges of courtesy are beneficial in their influence.

DR. A. WALTER SUTER, of Herkimer, N. Y., in a brief note to the medical society of the State of New York, showed that recent experiments with bullets infected with the bacillus anthrax proved

that the heat produced by the friction did not, as might have been expected, sterilise the projectile, and hence this opened up an additional source of wound infection.

Dr. George H. Rohé has resigned as superintendent of the Maryland Hospital for the Insane, at Catonsville, usually called "Spring Grove," and will take charge of the new insane hospital to be built at Springfield, Md.

Hon. Melvil Dewey, secretary of the board of regents, University of the State of New York, has been exonerated from all suspicion of irregularity or illegality in the conduct of his office. The investigating committee of the legislature made its report to the assembly April 24, 1896, in which it states that not a single charge was sustained. Those who know Mr. Dewey will not be surprised at this result, though they were amazed at the maliciousness in which the charges were conceived and pursued.

Obituary.

Dr. James West Roosevelt, of New York, died suddenly of pneumonia on Friday, April 10, 1896, in the thirty-eighth year of his age. Not often has the profession been so shocked through the loss of one of its members as it was in this instance. He developed the first symptoms on Thursday morning, the disease advanced with astonishing rapidity, edema of the lungs supervened and eighteen hours from the initiative chill Dr. Roosevelt was dead. This is a singular exhibition of the mysterious and alarming rapidity with which pneumonia may progress to fatality. Dr. Roosevelt was an active member of several medical societies and social clubs. For a number of years Dr. Roosevelt devoted much of his time to investigations of diseases of the lungs, and a little over a year ago he organised the Seton hospital for consumptives at Spuyten Duyvil, in which institution he took a great interest and at his own expense fitted up its very complete pathological laboratory. Dr. Roosevelt was fast achieving fame as a clinician and investigator, and for some years had been attending physician at the Roosevelt and Bellevue hospitals. He was a frequent contributor to medical and lay magazines and was a ready and force-

ful speaker in medical society discussions. Dr. Roosevelt possessed great amiability of character and his attached friends were many and strong. His widow survives him with three children.

Dr. James Jay Mapes, of New York, died April 10, 1896, at Saranac Lake, after a prolonged illness. Dr. Mapes, who was one of the best-known among the younger physicians, was the son of Charles G. Mapes, the great-grandson of Gen. James Jonas Mapes, who commanded the American forces about New York during the war of 1812, and a nephew of Mary Mapes Dodge, editor of St. Nicholas. After taking his medical degree at the College of Physicians and Surgeons he served as interne at the New York hospital. During his medical course of study he spent his summers at the University of Edinburgh, where he won the first gold medal bestowed upon an American for highest honors in anatomy.

After graduation he went abroad again and continued his medical studies at Vienna and Paris. While in Paris he studied under Dr. Roux, at the Pasteur Institute, when the discovery of the antitoxin treatment for the cure of diphtheria was made, and when he returned home Dr. Roux gave him some vials of the antitoxin fluid, which was the first brought to this country. During his absence abroad Dr. Mapes was appointed resident physician of the Nursery and Child's Hospital in New York, and he took charge on January 1, 1895. At that time an epidemic of diphtheria prevailed at the hospital and the mortality was very large. Dr. Mapes applied the antitoxin treatment with marked success. He had written a number of articles on the subject.

Society Meetings.

THE ATLANTA MEETINGS.

A large group of medical meetings will be held at Atlanta, Ga., during the first week in May. The following is the list in the order of their appointed meetings: American Academy of Medicine, May 2d and 4th, at the Hotel Aragon; Medical Publishers' Association, 9.30 A. M., May 4, room 105, Kimball House; National Confederation of State Medical Examining and Licensing Boards, Monday, May 4th, 10 o'clock A. M., breakfast room, Hotel Aragon; Georgia Pharmaceutical Association, Monday, May 4th, hour and

place to be named; Southern Railroad and Alabama Great Southern Railroad Surgeons, in the ball room of the Kimball House, Monday, May 4th, at an hour to be named; the American Editors Association, in the Kimball House banquet hall, Monday evening, May 4th, 7 o'clock; the American Medical Association, at the Grand, Tuesday, May 5th, at 11 o'clock A. M., to continue four days.

Dr. Willis F. Westmoreland is chairman of the committee of arrangements on the part of the American Medical Association and Dr. J. McFadden Gaston is chairman of the committee of arrangements on the part of the American Academy of Medicine. To the untiring efforts of these two men is due the admirable arranging and placing of this large group of meetings.

THE American Orthopedic Association will hold its tenth annual meeting at Buffalo, Tuesday, Wednesday and Thursday, May 19, 20 and 21, 1896, under the presidency of Dr. Royal Whitman, of New York. The secretary, Dr. John Ridlon, of Chicago, has prepared the following preliminary program:

The president's address, by Dr. Royal Whitman, New York. Some practical points in the treatment of lateral curvature of the spine, by Dr. A. B. Judson, New York. Some etiological factors in lateral curvature of the spine, by Dr. E. G. Brackett, Boston. Case illustrating the absurdity of treating ordinary lateral curvature (scoliosis) by spinal supports, by Bernard Roth, F. R. C. S., London. The rationale of gymnastic exercise and pressure correction in the treatment of scoliosis, by Dr. L. A. Weigel, Rochester. The rapid cure of rotary lateral curvature of the spine and other postural deformities, by means of thorough development and corrective exercises with heavy weights, with a demonstration of the method, by Dr. Jacob Teschner, New York (by invitation). A simple and efficient brace for lateral curvature, by Dr. S. L. McCurdy, Pittsburg. Congenital misplacement of the femur anteriorly, by Dr. DeForest Willard, Philadelphia. Further remarks on congenital dislocation of the hip, by Bernard E. Brodhurst, F. R. C. S., London. Report of a case of double congenital dislocation of the hip, treated by the Lorenz method of operation, by Dr. Reginald H. Sayre, of New York. The cure of congenital dislocation of the hip by means of the "functional weighting" method, without open operation, by Dr. Adolf Lorenz,

Vienna. Spontaneous dislocation of the hip, by Dr. William J. Taylor, Philadelphia. The treatment of club-foot: (*a*) when to commence treatment and how; (*b*) the indications for mechanical treatment; (*c*) the limitations of mechanical treatment; (*d*) the indications for operative treatment; (*e*) results in 343 operations performed by the writer, by Dr. A. M. Phelps, New York. Investigations on flat-foot, by Dr. E. H. Bradford, Boston. Mechanical support for flat-foot, by Dr. John C. Schapps, Brooklyn. The anterior transverse arch of the foot, by Dr. Joel E. Goldthwait, Boston. Injuries of the tarsus and the ankle joint, by Dr. J. D. Griffith, Kansas City. Subtendinous exostosis, by Dr. E. G. Brackett, Boston. The mechanical treatment of ingrown toe nail, by Dr. Henry Ling Taylor, New York. The operative treatment of paralytic deformities of the foot, with particular reference to arthrodesis, by Dr. V. P. Gibney, New York. Some mechanical problems in the treatment of Pott's disease, by Dr. John C. Schapps, Brooklyn. The operative treatment of threatening abscesses in the high dorsal region, by Dr. E. H. Bradford, Boston. The treatment of Pott's paraplegia, with a report of two cases, by Dr. LeRoy W. Hubbard, New York. Osteomyelitis of the spine, by Dr. T. Halsted Myers, New York. Suppuration in joint and spinal disease and its relation to tubercular meningitis; an analytical study, by Dr. Samuel Ketch, New York. A study of the action of iodoform glycerine in tubercular osteomyelitis, by Dr. Harry M. Sherman, San Francisco. Joint disease in infancy, by Dr. Augustus Thorndike, Boston. The use of dry heat of high temperature in the treatment of chronic joint affections, by Dr. William E. Wirt, Cleveland. A theory of the ultimate etiology of deformity and its practical application, by Dr. Royal Whitman, New York. The probable cause of the limp in the first and second stage of hip-joint disease, by Dr. Harry M. Sherman, San Francisco. Femoral osteotomy for correction of hip deformity in adults, with a report of cases, by Dr. A. R. Shands, Washington (by invitation). A report of cases of osteosarcoma of the hip, by Dr. Arthur J. Gillette, St. Paul. Division of the hamstring tendons by the open method for correcting malposition and securing rest in tubercular disease of the knee, by Dr. Bernard Bartow, Buffalo. Tuberculosis of the wrist and carpus, by Dr. James E. Moore, Minneapolis. Symptoms and treatment of slight knock-knee in children, by Dr. Robert W. Lovett, Boston. Two cases of dislocation of the patella treated by

operation, by Dr. Joel E. Goldthwait, Boston. Some notes on spastic paralysis in children, by Dr. F. S. Coolidge, Chicago. Some recent modifications in the treatment of congenital wry neck, by William Adams, F. R. C. S., London. Contracted fingers, by Dr. Arthur J. Gillette, St. Paul. Congenital club-hand, the report of a case treated by operation, by Dr. C. E. Thomson, Scranton (by invitation). Rare cases from practice, by Dr. A. J. Steele, St. Louis. A report of some cases of unusual congenital deformities, by Dr. John Ridlon, Chicago. Congenital defects of the long bones, a report of cases and operations, by Dr. B. E. McKenzie, Toronto. Deformities of the humerus due to rickets, by Dr. Augustus Thorndike, Boston. A report of a family of anomalies, by Dr. S. L. McCurdy, Pittsburg.

In addition to the scientific program there will be a number of social functions, including an excursion to Niagara Falls, all under the management of Drs. Park and Bartow, of Buffalo, as a committee of arrangements.

The meetings of the association will be held at Alumni Hall, in the University of Buffalo and a cordial invitation is extended to all physicians to attend the several scientific sessions.

THE Alumni Association of the medical department of the University of Buffalo will hold its twenty-first annual meeting in connection with the semi-centennial anniversary of the establishment of the University, Tuesday, May 5, 1896, at Alumni Hall, University building. Following is the program:

Morning Session, 10.30 A. M.—Registration, report of executive committee, revision of constitution and by-laws, general report, report of treasurer, new business, election of officers for 1896–97.

Afternoon Session, 2 P. M.—(The discussions during the afternoon session will be limited to ten minutes.) President's address, Willis M. Baker, M. D. Colpoperineorrhaphy, Henry J. Garrigues, M. D., New York City, N. Y.; discussion, Drs. Roswell Park, M. A. Crockett, Eugene A. Smith. The state of the gastric mucosa in secretory disorders of the stomach, Max Einhorn, M. D., New York City, N. Y.; discussion, Drs. Charles G. Stockton, Allen A. Jones, A. L. Benedict. Reconstructive surgery of the tubes and ovaries, Robert T. Morris, M. D., New York City, N. Y.; discussion, Drs. M. D. Mann, W. W. Potter, C. C. Frederick. Some notes on the coronary arteries, George Dock, M. D.,

Ann Arbor, Mich.; discussion, Drs. H. R. Hopkins, Chas. Cary, DeLancey Rochester.

Commencement exercises, Music Hall, 7.30 P. M. Banquet, Hotel Genesee, 9.30 P. M.

The graduation exercises will be held in Music Hall at 7.30 o'clock in the evening, and members and their friends are invited to attend. Charles O'Connor will address the graduating class.

This year the annual dinner will be given at the Hotel Genesee, and seats will be taken as near 9.30 o'clock as possible. Tickets will be on sale ($2.00) during the morning and afternoon sessions, and also at the Hotel Genesee.

The executive committee again urges all alumni to enroll themselves as active members of the association. The remarkable advancement and success of the university is a benefit to each alumnus, and he should still further show his loyalty to his alma mater by sustaining the good work with his attendance, efforts and contributions.

The following named are the present officers of the association: President, Willis M. Baker, Warren, Pa.; first vice-president, P. W. Van Peyma, Buffalo, N. Y.; second vice-president, D. A. Currie, Englewood, N. J.; third vice-president, Herman G. Matzinger, Buffalo, N. Y.; fourth vice-president, J. A. McPherson, Tonawanda, N. Y.; fifth vice-president, J. W. Putnam, Buffalo, N. Y.; permanent secretary, E. L. Frost, Buffalo, N. Y.; recording secretary, N. V. Chappell, Buffalo, N. Y.; treasurer, H. U. Williams, Buffalo, N. Y.

Board of trustees: F. E. L. Brecht, 1896, Buffalo, N. Y.; E. C. W. O'Brien, 1897, Buffalo, N. Y.; Jos. Fowler, 1898, Buffalo, N. Y.; Julius Wenz, 1899, Lancaster, N. Y.; H. P. Trull, 1900, Williamsville, N. Y.

Executive committee: Allen A. Jones, chairman, Buffalo, N. Y.; Albert T. Lytle, secretary, Buffalo, N. Y.; H. G. Matzinger, Buffalo, N. Y.; W. M. Baker, president, *ex-officio;* John Parmenter, secretary of the faculty, *ex-officio.*

THE Ohio State Pediatric Society will hold its annual meeting at Columbus, on Wednesday, May 27, 1896. Those who have papers to present should at once communicate with the secretary, Dr. Geo. M. Clouse, of Columbus, giving title of paper. The other officers of the society are: president, Dr. S. W. Kelly, Cleveland; vice-president, Dr. J. P. West, Bellaire; chairman of council, Dr.

J. M. Dunham, of Columbus. Any regular physician who is particularly interested in pediatrics and a worker therein is eligible to become a member of this young and growing society. This is the first pediatric society to organise within state boundary lines. The diseases of children are of increasing importance and a full attendance at this meeting is particularly urged.

THE American Microscopical Society will hold its nineteenth annual meeting in the new Carnegie Library Building, Pittsburg, Pa., Tuesday, Wednesday, Thursday and Friday, August 18, 19, 20 and 21, 1896. A hearty welcome will be extended to all inter-

CARNEGIE LIBRARY BUILDING, PITTSBURG, PA.

ested in the microscopical sciences. Applications for membership and titles of papers to be read at the meeting should be addressed to A. Clifford Mercer, M. D., president, Syracuse, N. Y., or to Wm. C. Krauss, M. D., secretary, 382 Virginia street, Buffalo, N. Y.

THE Association of Military Surgeons of the United States will hold its sixth annual meeting at Philadelphia, Tuesday, Wednesday and Thursday, May 12, 13 and 14, 1896, under the presidency of Col. Louis W. Read, M. D., Surgeon-General of Pennsylvania, Norristown. The secretary, Lieut.-Col. Eustathius Chancellor, Medical Director N. G. Mo., of St. Louis, has sent out an elaborate program, consisting of twenty-seven titles.

Medical Director Albert L. Gihon, U. S. Navy (retired), is first vice-president, and Major Albert H. Briggs, M. D., N. G. N. Y., Buffalo, is a member of the executive council.

The morning session of Tuesday will be held at the Broad street theater at 10 o'clock, where addresses will be made by Governor Hastings and others, while the regular business and scientific sessions will be held at the Hotel Walton. There will be numerous social functions and it is expected that this meeting will be one of the largest and best in the history of the association.

THE American Laryngological, Rhinological and Otological Society held its second annual meeting at the Academy of Medicine, New York city, April 17 and 18, 1896, under the presidency of Dr. Edward Bradford Dench. An interesting program of twenty-five titles, prepared by the secretary, Dr. Robert Cunningham Miles, was discussed. An annual dinner was held and the meeting was successful in every way. There are 108 Fellows of this society, among whom we notice the names of Drs. F. Whitehill Hinkel and W. Scott Renner. The latter was present at this meeting and reports it as well attended and successful from a scientific point of view. The next meeting will be held in Washington under the presidency of Dr. Frank Hyatt, of that city.

College and Hospital Notes.

IT IS stated in the newspaper press that land has been secured on Goodrich street for the erection of a new building, to be occupied as the College of Dentistry, which is the dental department of the University of Buffalo. The space the dental department now occupies in the old university building is badly needed by the medical department, which is also growing at a very rapid rate.

It is probable that ground will be broken almost immediately for the erection of the new building, which will be especially planned for the uses of a dental college of most advanced character. It will be able to accommodate a number of hundred students and will materially add to the educational advantages of Buffalo.

DR. C. M. DANIELS, chief surgeon of the Erie railway, announces the following plan for the care of the sick and disabled employees

of that corporation: Hospitals will be established at convenient points along the entire system, including the N. Y., P. & O. and the Chicago & Atlantic. Wherever a hospital is already established it will be made a part of the new system. Membership in the organisation will be obligatory on all new employees, but with old ones it will not be compulsory, though it is believed they will generally avail themselves of its benefits.

The fund for the maintenance of the association will be derived from assessments. All officers, down to and including superintendents of divisions, will pay $1 a month; employees receiving from $75 to $100 a month, 60 cents; those receiving $50 a month, 50 cents; those receiving less than $50, 25 cents a month; while those whose monthly pay does not reach $25 will pay nothing. Membership in the association will confer upon the employees the right to go to the hospitals and remain as long as their illness continues, at the expense of the association.

It will give them the benefit of the best medical skill and hospital care and treatment free of cost to themselves. It is estimated that the annual revenues will be $105,000. The Erie company will contribute $10,000.

Dr. Woods Hutchinson, professor of anatomy in the State University of Iowa, has been chosen lecturer on Comparative Pathology and the Ancestry of Disease, in the Medical Department of the University of Buffalo.

Book Reviews.

The Functional Examination of the Eye. By John Herbert Claiborne, Jr., M. D., Adjunct Professor of Ophthalmology, New York Polyclinic; Instructor of Ophthalmology in the College of Physicians and Surgeons, New York; Assistant Surgeon to the New Amsterdam Eye and Ear Hospital, New York; formerly Attending Surgeon, Northwestern Dispensary, Eye, Ear and Throat Department; formerly Clinical Assistant to the Manhattan Eye and Ear Hospital; author of Theory and Practice of the Ophthalmoscope. Octavo, pp. 96. With twenty-one illustrations. Price, $1.00. Philadelphia: The Edwards & Docker Co. 1895.

This little volume purports to make the subject of functional examinations of the eyes "clear beyond peradventure for those who shall read these pages. It is the author's purpose, in short, to present it in such a way that a student may follow the lines laid down and perform the examination with scientific and mechani-

cal accuracy without further instruction." The author believes that "a fair success in teaching the subject for a number of years" has won for him "the right of presenting it," and that "the ventilation of the subject," "while it may be tedious," is "essential for those who know little of the subject or for those who have forgotten what they once knew;" and he has, therefore, intentionally adopted "a somewhat colloquial style" and some "graphic formulæ," and has consoled himself "that he has put the known facts of a dry subject in a pleasing form."

It will be seen by these quotations what the author proposes to do, and how well and in what improved style he thinks he has done it. If the student, however, expects to learn from this book how to do good work in the correction of errors of refraction, we fear he will be exceedingly disappointed. No man can succeed in getting the best results by the methods here taught.

A. A. H.

THE AMERICAN YEAR-BOOK OF MEDICINE AND SURGERY. Being a Yearly Digest of Scientific Progress and Authoritative Opinion in all Branches of Medicine and Surgery, drawn from Journals, Monographs and Text-Books of the leading American and Foreign Authors and Investigators. Collected and arranged with Critical Editorial Comments. By J. M. Baldy, M. D., C. H. Burnett, M. D., Archibald Church, M. D., C. F. Clarke, M. D., J. Chalmers DaCosta, M. D., W. A. N. Dorland, M. D., V. P. Gibney, M. D., Homer W. Gibney, M. D., Henry A. Griffin, M. D., John Guitéras, M. D., C. A. Hamann, M. D., H. F. Hansell, M. D., W. A. Hardaway, M. D., T. M. Hardie, B. A., M. B., C. F. Hersman, M. D., B. C. Hirst, M. D., E. Fletcher Ingals, M. D., W. W. Keen, M. D., H. Leffman, M. D., V. H. Norrie, M. D., H. J. Patrick, M. D., William Pepper, M. D., D. Riesman, M. D., Louis Starr, M. D., Alfred Stengel, M. D., G. N. Stewart, M. D., and Thompson S. Westcott, M. D. Under the general editorial charge of GEORGE M. GOULD, M. D. Profusely illustrated with numerous woodcuts in text and thirty-three half-tone and colored plates. Royal 8vo, pp. vi.—1183. Price, $6.50. Philadelphia: W. B. Saunders. 1896.

This latest addition to the series of year-books is the most colossal of its group. There seems to be a desire on the part of each of the American medical publishers to issue an annual epitomé of the progress of medical science, which for convenience is called a year-book; but this one, it must be confessed, overreaches all the others in size and in general comprehensiveness. Whether it will become more popular with the profession remains to be seen.

Of the twenty-eight editors, including the editor-in-chief, sixteen of them reside in Philadelphia. While this may be advantageous to the editor in charge in facilitating proof-reading and in otherwise hastening the publication of the work, it would seem that to distribute the work over a wider area of country would give it greater national coloring and importance.

Some idea of the magnitude of the treatise may be obtained

from the fact that general medicine occupies 162 pages of the book; general surgery, 180 pages; obstetrics and gynecology, 182 pages; pediatrics, 62 pages; nervous and mental diseases, 79 pages; dermatology and syphilis, 69 pages; orthopedic surgery, 7 pages; ophthalmology, otology, rhinology and laryngology, 283 pages; pathology, 99 pages; materia medica, experimental therapeutics and pharmacology, 52 pages; anatomy and physiology, hygiene and sanitary chemistry, medical jurisprudence and clinical chemistry, 28 pages. In the last section, page 1123, we notice a statement to the effect that the office of coroner in the state of New York has been abolished. This is an error, more's the pity; but if the last legislature had performed its full duty under the constitution the office would have been abolished.

An elaborate index, of fifty-five three-column pages, furnishes a fitting and adequate key to this excellent grouping of the salient points in medical progress for a year.

FUNCTIONAL AND ORGANIC DISEASES OF THE STOMACH. By SIDNEY MARTIN, M.D., F.R.S., F.R.C.P., Assistant Physician and Assistant Professor of Clinical Medicine at University College Hospital; Assistant Physician to the Hospital for Consumption and Diseases of the Chest, Brompton. Octavo, pp. xvi.—505. With fifty-seven illustrations. Edinburgh and London: Young J. Pentland. Philadelphia: J. B. Lippincott Co. 1895.

This treatise will be welcomed by English-speaking people, as it is many years since diseases of the stomach have been discussed in a systematic treatise. The author begins with a chapter on the anatomy and physiology of the stomach, of which little need be said beyond commending it as a careful exposition of the subject. In the next chapter he discusses the digestibility of various articles of diet. This involves cookery and other methods of preparing food. A table of the digestibility of articles of diet in the stomach affords an interesting study. Some of the information to be gleaned from it will be found in opposition to popular notions.

In the next two chapters the author presents an able discussion of the pathology of the indigestion of food. A careful study of these chapters by every physician engaged in general practice is recommended. Methods of examination of the functions of the stomach in disease form the subject of Chapter 5. In it the author describes simple methods which he asserts can be performed, to a large extent, with as much ease as is the examination of the urine. The author takes up the symptoms referable to indigestion of food in Chapter 6, and in Chapter 7 discusses functional disorders of the stomach. In the latter chapter will be found an analysis of gastric irritation, caused by neuroses of the stomach, which will prove of much interest to the reader. Mechanical and active congestion of the stomach, gastritis and gastric catarrh are dealt with in Chapter 8, the latter in a most

clear and satisfactory manner. Toxic and infective gastritis, together with atrophy and degeneration of the stomach, form the subject matter of Chapter 9.

In the next three chapters the author considers the treatment of acute and chronic affections of the stomach. In Chapter 10 he presents their medicinal treatment; in Chapter 11 he offers their treatment by diet and discusses the value of the different prepared foods—peptonised, malted, fatty and the like; while in Chapter 12 their general hygienic treatment is set forth. In this chapter the value of lavage is properly estimated. Martin says it is of great benefit in certain cases, but that it is a method that has been much abused and must be applied with great circumspection.

The next chapter, 13, is set apart to the consideration of bleeding from the stomach, and in Chapter 14 dilatation of the stomach is fully discussed. Ulcer of the stomach is allotted to Chapter 15, which is a most interesting one and deserves careful reading. Finally, cancer of the stomach is dealt with in Chapter 16 in a masterly manner.

From this epitomé may be gathered the scope and import of the treatise. It is written with conciseness and in the best of English. The author shows he is master of the subject in every chapter of the book. It is well printed and has some excellent illustrations.

AN AMERICAN TEXT-BOOK OF SURGERY. FOR PRACTITIONERS AND STUDENTS. By Charles H. Burnett, M. D., Phineas S. Conner, M. D., Frederic S. Dennis, M. D., William W. Keen, M. D., Charles B. Nancrede, M. D., Roswell Park, M. D., Lewis S. Pilcher, M. D., Nicholas Senn, M. D., Francis J. Shepherd, M. D., Lewis A. Stimson, M. D., William Thompson, M. D., J. Collins Warren, M. D., and J. William White, M. D. Edited by WILLIAM W. KEEN, M. D., LL.D., and J. WILLIAM WHITE, M. D., Ph.D. Second edition, carefully revised. Illustrated. Imperial 8vo, pp. xiv.—1248. Price, $7.00 cloth; $8.00 sheep and $9.00 half-Russia. Philadelphia: W. B. Saunders, 925 Walnut street. 1895.

The first edition of this work appeared in the Autumn of 1892, and it rapidly crept into favor with the profession. It has already been adopted as a text-book by over sixty medical schools in America and has been accorded a large foreign sale. It is not surprising, therefore, that the first edition was early exhausted and that a second is already meeting with large demand.

The editors have taken advantage of this opportunity to incorporate some of the many advances surgery has made during the past three years in this edition. The more notable of these relate to intracranial and spinal surgery; surgery of the chest; surgery of the digestive tract; intestinal anastomosis with the Murphy button, and a chapter on symphyseotomy. Additions have also been made to the sections relating to fractures and dislocations, appendicitis, hernia and amputations of the breast.

In a former review we referred to the excellent character of its illustrations. In the present edition many of these have been redrawn and a number of new ones have been added. There are a number of admirable features about this work and we have no doubt it will continue to hold a popular place in the literature of surgery. The mechanical execution is all that could be desired, but we advise intending purchasers to secure it bound in leather, as its weight is too great to be sustained long by cloth.

The tendency of the present is towards the encyclopedic form of literature, and if all treatises written on this plan were as free from defects as this American text-book of surgery, it would go far toward the justification of this method. This book is especially adapted to the wants of the physician who must limit his library to a few well-selected books.

TWENTIETH CENTURY PRACTICE. An International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by THOMAS L. STEDMAN, M. D., New York City. In twenty volumes. Volume VI.: Diseases of the Respiratory Organs. New York: William Wood & Co. 1895.

Owing to delay in the receipt of manuscript, the sixth volume of this interesting series appears before the fifth. It is devoted to the consideration of diseases of the respiratory tract, and very properly begins with those of the nose. This section is written by Proctor James, of London, and contains the essential details commensurate with our present knowledge of the subject. Following this, diseases of the accessory sinuses of the nose are taken up by Jonathan Wright, of Brooklyn. The antrum receives due consideration. It is an important locality and possesses great anatomical and pathological interest.

Next come diseases of the nasal pharynx and pharynx, to which E. J. Moure, of Bordeaux, devotes over 100 pages. Syphilitic and tubercular diseases of this region are always of great importance and are intelligently dealt with by this author. Moure also treats of diseases of the tonsils in a section of about fifty pages, which is one of the most important in the book. Neglected disease of these organs often lead to serious or incurable results. Every physician should pay close attention to this subject. A section is devoted to diseases of the ear, written by Albert H. Buck, of New York. This author is experienced and always interesting; never more so, however, than in these pages.

The section devoted to diseases of the larynx is written by Francke H. Bosworth, of New York, who is amply qualified to deal with this important subject. That its gravity is appreciated may be inferred from the fact that he devotes 168 pages to its consideration, much of which treats of syphilitic and tubercular affections of this organ. Foreign bodies in the larynx and the laryngeal diseases of childhood, always fraught with intense interest, are here amply set forth.

In the next section we find diseases of the trachea and bronchial tubes dealt with under the joint authorship of Thomas Grainger Stewart and George Alexander Gibson, of Edinburgh. In the 186 pages devoted to this branch of the subject will be found its latest exposition in the most concise manner.

Not of the least importance is the last section of the book, in which are considered diseases of the lungs (excluding croupous pneumonia and tuberculosis) by Winslow Anderson, of San Francisco, a subject this author is abundantly able to deal with. The two affections which he omits will be considered in a later volume, together with the other infectious diseases.

Taken altogether, this volume may be fairly estimated to be the most important of the series thus far published.

THE INTERNATIONAL MEDICAL ANNUAL AND PRACTITIONER'S INDEX. A work of reference for Medical Practitioners. Fourteenth year. Price, $2.75. New York: E. B. Treat, 5 Cooper Union. 1896.

The 1896 volume of the annual comes at its regular time and like its predecessors is eagerly welcomed by the profession. The general make-up of the 1896 number is similar to the preceding volumes and contains 728 pages of solid matter, every page of which is good reading. The therapeutic review of the past year, by Professor H. A. Hare, comprises short sketches on anesthetics, strychnia, chlorate of potassium and acetanilide.

The dictionary of new remedies by various European and American authors comprises fifty-eight pages, general anesthetics, chloralose and uranium receiving quite extended notice. The special essays include a very concise report on the parasite of malaria, its biology and method of detection, including a colored plate. The article on diagnosis of toothache and neuralgia of dental origin is timely and is ably written by Henry Sewill, M. R. C. S. A very interesting article to many physicians is that on the remedial value of cycling, by Oscar Jennings, M. D., M. R. C. S., of Paris. The value of cycling to women receives important consideration.

The article on sensory distribution of spinal nerve roots, by William Thorburn, is an important addition to our knowledge of nerve distribution and sensory areas. The article is accompanied by a double-page colored plate.

The article on angio-neurosis is well presented by W. Ramsay Smith and is also accompanied by four excellent illustrations. The article on life assurance is from the pen of F. DeHaviland Hall, physician to the Westminster hospital. He considers carefully the personal history, family history, present condition and environment of the assured individual.

The dictionary of new treatment in medicine and surgery embraces many excellent monographs, especially on diphtheria treatment, diseases of the ear, eye, bladder, heart, kidney, larynx, treatment of obstinate hiccough, intestinal surgery, leucorrhea and

the like. The new photography receives careful attention, including several plates of photographs by E. Henry Fenwick.

The concluding chapters treat of inventions in sanitary science, new medical and surgical instruments, new books published during the year and a very complete index.

To those who have the former volumes this one needs no words of recommendation, but to those physicians who do not possess the former volumes we advise to begin with the 1896 volume. The book is bound similar to the volumes in the series of Treat's classics. W. C. K.

PRACTICAL URINALYSIS AND URINARY DIAGNOSIS. A Manual for the Use of Physicians, Surgeons and Students. By CHARLES W. PURDY, M. D., Queen's University; Fellow of the Royal College of Physicians and Surgeons, Kingston; Professor of Urology and Urinary Diagnosis at the Chicago Post-Graduate Medical School. Second revised edition. With numerous illustrations, including photo-engravings and colored plates. In one crown 8vo volume, 360 pages. In extra cloth, $2.50 net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry street. 1895.

It is just a year ago that we wrote a notice of the first edition of this book. That a second edition is demanded so soon is sufficient testimony to the popularity of the work. There is very little change made in this edition, excepting to correct errors and to add a few plates, hence there is very little to say in regard to it beyond calling attention to its renewed publication.

The following from our first notice is, however, pertinent to reproduce: an appendix is added to the book, which treats of the examination of urine for life insurance. Every examiner should familiarise himself with this important branch of the subject. Life insurance companies might, with great propriety, reprint this section and distribute it among their examiners. A good index closes this well-printed, interesting and valuable treatise, which we commend as one of the best of its kind.

DIRECTIONS FOR WORK IN THE HISTOLOGICAL LABORATORY, more especially arranged for the use of classes in the University of Michigan. By G. CARL HUBER, M. D., Assistant Professor of Histology and Embryology. Second edition. Geo. Wahr, Publisher, Ann Arbor, Mich. 1895.

As indicated, this very practical little work was intended for use in the working laboratory and is arranged in the form of lessons, each lesson taking up several types of tissues, with a description of the hardening process, staining and mounting media employed. The tissue is carefully described histologically and the student required to study the various characteristics of the tissue under different powers and to make drawings of the same on the blank pages inserted after each lesson. Professor Huber's plan is

most ingenious and deserves to be imitated by the histologists and pathologists of all our medical schools. His labors deserve a greater field of appreciation than in his own school, and this excellent but modest little work could well be adopted, and with profit, by every medical college in America. The publisher has aided materially in making the book so pleasing and acceptable and deserves great credit. W. C. K.

A GUIDE TO THE PRACTICAL EXAMINATION OF URINE, for the Use of Physicians and Students. By JAMES TYSON, M.D., Professor of Clinical Medicine in the University of Pennsylvania, and Physician to the Hospital of the University, etc. Duodecimo, pp. xii.—276. Ninth edition, revised and corrected. With a colored plate and wood engravings. Price, $1.25. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1895.

No similar treatise has been so long before the professional public and none comes so near to being a classic on the subject of which it treats as does this one. No large additions have been made since a former edition appeared, but some minor paragraphs have been omitted.

A French translation of this useful book has lately appeared in Paris, under the editorship of Drs. Gautrelet and A. S. Clarke, and published by the Société d'Éditions Scientifiques.

SURGERY. A Practical Treatise, with Special Reference to Treatment. By C. W. MANSELL MOULLIN, M. A., M. D., Oxon.; Fellow of the Royal College of Surgeons; Surgeon and Lecturer on Physiology to the London Hospital, etc.; assisted by various writers on special subjects. With 623 illustrations. Royal 8vo, pp. 1250. Third American edition, revised and edited by JOHN B. HAMILTON, M. D., LL.D., Professor of the Principles of Surgery and Clinical Surgery, Rush Medical College, Chicago; Professor of Surgery, Chicago Polyclinic; Surgeon, formerly Supervising Surgeon-General, U. S. Marine Hospital Service, etc., etc. Price, $6.00. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1895.

The first edition of this work received appropriate notice in these columns, in which it was considered in some detail. We did not receive the second edition, which was edited by Gen. Hamilton, as is also the present one.

The appearance of successive editions, with but two years intervening between each, is indicative of the firm hold it has taken upon surgeons; this, too, in spite of the fact that numerous other surgical treatises have appeared since this one first issued. The author is fortunate in the selection of his American editor, who well knows surgeons and their needs in this country, and whose literary attainments specially fit him for the task he has assumed.

Even though but two years have elapsed since the last edition was issued, it has yet been found necessary to make considerable revisions of certain parts of the work, particularly those relating

to intracranial and spinal surgery and intestinal anastomosis. The method devised and so skilfully practised by Professor Murphy, of Chicago, is described with much precision and clearness.

In the description of the surgery of fibroid tumors of the uterus, Professor Hamilton gives preference to the elastic ligature of Pozzi over the Koeberlé serre-neud. Vaginal hysterectomy, after Péan, is described, but no opinion is expressed as to its relative merits.

The additions and comments made by the editor are inclosed in brackets, which makes identification easy. Taken altogether, this is a treatise that no modern surgeon can afford to do without.

TRANSACTIONS OF THE AMERICAN GYNECOLOGICAL SOCIETY. Vol. XX., for the year 1895. Edited by HENRY CLARK COE, M.D., Secretary, New York. Published by the society. Philadelphia: William J. Dornan, Printer. 1895.

This volume is the most elaborate of any yet published by this society, containing 633 pages. The papers, thirty-one in number, cover almost the entire field of operative gynecology, and they are discussed with the ability that characterises the work of this society. The paper by Dr. Charles Jacobs, of Brussels, on vaginal hysterectomy, to which he has given the somewhat peculiar title of Indications for total castration of the vagina, will naturally attract considerable attention. He gives the most recent statistics of this operation as follows: Landau, 141 cases, 2 deaths; Léopold, 44 cases, 1 death; Sænger, 17 cases, 2 deaths; Péan, 450 cases, 12 deaths; Richelot, 219 cases, 11 deaths; Doyen, 253 cases, 18 deaths; Segmond, 200 cases, 14 deaths; Gallet, 29 cases, 2 deaths; Jacobs, 403 cases, 12 deaths. Total, 1,756 cases, 74 deaths; 4.2 per cent. mortality. The volume closes with a memorial of Dr. William Goodell, to which is appended a list of the papers published by the deceased, 113 in all, giving the date and place of publication. To this volume is appended a general index of the twenty volumes published by the society, which involved a great deal of hard work, but amply repays for it in the convenience it serves.

COLOR-VISION AND COLOR-BLINDNESS. A Practical Manual for Railroad Surgeons. By J. ELLIS JENNINGS, M. D. (University of Pennsylvania), formerly Clinical Assistant Royal London Ophthalmic Hospital (Moorfields); Lecturer on Ophthalmoscopy and Chief of the Eye Clinic in the Beaumont Hospital Medical College; Ophthalmic and Aural Surgeon to the St. Louis Mullanphy and Methodist Deaconess Hospitals; Consulting Oculist to the Missouri, Kansas & Texas Railway System; Fellow of the British Laryngological and Rhinological Association. Illustrated with one colored full-page plate and twenty-one photo-engravings. Cloth, $1.00 net. Philadelphia: The F. A. Davis Co., Publishers. 1896.

This little work of 100 pages presents in an entertaining way

the various color tests. The chapters are short and no space is taken up with the customary persiflage so rampant in the average medical article. The historical sketch, physiological anatomy of the retina, classification of color-blindness and the various tests are all very satisfactory. As he also takes up acuteness, range and field of vision with tests for hearing, it would seem to be a mistake to not also include marked muscular defects and the diagnosis of astigmatism, and thus make it what the work purports to be—"a complete manual for railway surgeons." R. H. S.

MATERIA MEDICA AND THERAPEUTICS. A Practical Treatise, with Especial Reference to the Clinical Application of Drugs. By JOHN V. SHOEMAKER, A. M., M. D., LL. D., Professor of Materia Medica, Pharmacology, Therapeutics and Clinical Medicine, and Clinical Professor of Diseases of the Skin, in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital, Philadelphia, etc., etc. Third edition, thoroughly revised. Reset with new type and printed from new electrotype plates. Royal 8vo, pp. ix.—1108. Extra cloth, $5.00 net; sheep, $5.75 net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry street. 1895.

The third edition of this work comes to us with the two volumes of former editions combined into one. This improvement is in the interest of convenience and will be appreciated by the many readers of the treatise.

This edition presents whatever has transpired during the two past years, either in the chemical laboratory or in the clinic room, that may pertain to materia medica and therapeutics. This has involved the publication of much additional matter, especially in the descriptions of the coal-tar series. Treatment by means of animal extracts and immunised serum or antitoxins has received much attention, in an endeavor to bring the subject forward to our present state of knowledge.

In the enumeration of preparations, the author conforms to the United States Pharmacopeia of 1890, and he has thoroughly revised the indexes. A consideration of agencies other than medicine, in their application to the treatment of disease, forms an interesting and useful section, which is comprised in part third of the treatise. Those who possess the former editions will eagerly seek this one and those who do not will profit in its reading.

A MANUAL OF OPERATIVE SURGERY. By LEWIS A. STIMSON, B. A., M. D., Professor of Clinical Surgery in the University of the City of New York. New (third) edition. In one royal 12mo volume of 614 pages, with 306 illustrations. Cloth, $3.75. Philadelphia: Lea Brothers & Co., Publishers. 1895.

This book is familiar to the profession through the two editions that have already been exhausted, hence there is little to be said in regard to it in addition to what we have heretofore written

in noticing the first and second editions. The author, who is well known throughout the country as a progressive surgeon, has utilised this opportunity to bring his work forward and place it abreast of present conditions. He says in order to do this it has been found necessary almost wholly to rewrite the book. The principal changes, however, will be found in the chapters relating to surgery of the cranium and abdomen. One of the advantages of this book is its convenient size, and a busy surgeon will often avail himself of the opportunity to consult it on that account. It is one of the best surgical manuals extant.

PRINCIPLES OF SURGERY. By N. SENN, M. D., Ph. D., LL. D., Professor of Practice of Surgery and Clinical Surgery in Rush Medical College, Chicago; Professor of Surgery in Chicago Polyclinic; Attending Surgeon to the Presbyterian Hospital; Surgeon-in-Chief to St. Joseph's Hospital; Ex-President American Surgical Association, etc., etc. Second edition, thoroughly revised. Illustrated with 178 wood-engravings and five colored plates. Royal octavo, pp. xvi.—656. Extra cloth, $4.50 net; sheep or half-Russia, $5.50 net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry street.

In our notice of the first edition of this treatise we remarked that it was based largely on the personal experience and study of the author. This feature is of much advantage where an author possesses so much skill in observing facts and accuracy in recording them as does Senn. The five years that have elapsed since the appearance of the first edition have been fruitful in pathological advances and have enriched the whole surgical field with many valuable additions. Seizing upon this opportunity, this author has brought his treatise forward, thus making it conform to present conditions. New material has been added and new illustrations have been supplied.

It must be remembered that this is a treatise on the principles of surgery, and is not intended to embrace the whole field of surgical science and art. He has skilfully kept within his original purpose, confining his treatise to the application of surgical principles to certain pathological conditions. He makes a prominence of the relation of bacteriology to etiology and pathology; he discusses the cellular process of regeneration and inflammation and does not forget to give due prominence to diagnosis, prognosis and treatment.

It is the most classic of the products from the prolific pen of this distinguished author.

BOOKS RECEIVED.

Diagnosis and Treatment of Diseases of the Rectum, Anus and Contiguous Textures. Designed for Practitioners and Students. By S. G. Gant, M. D., Professor of Diseases of the Rectum and Anus, University and Woman's Medical Colleges; Rectal and Anal Surgeon to All-Saints, German and Scarritt's Hospital for Women, Kansas City,

etc. With two chapters on Cancer and Celiotomy, by Herbert William Allingham, F. R. C. S., Eng., Surgeon to the Great Northern Hospital, etc. Octavo, pp. xiv.—399. Illustrated with sixteen full-page chromolithographic plates and 115 wood-engravings in the text. Philadelphia: F. A. Davis Co. 1896.

Transactions of the Medical Society of the State of North Carolina. Forty-second Annual Meeting, held at Goldsboro, N. C., May 14, 15 and 16, 1895. Wilmington, N. C.: Ledwin Brothers, Printers and Binders. 1895.

An Inquiry into the Difficulties Encountered in the Reduction of Dislocations of the Hip. By Oscar H. Allis, M. D., Fellow of the College of Physicians and of the Academy of Surgery, Philadelphia, etc. The Samuel D. Gross Prize Essay. Philadelphia. 1896.

Coca and Its Therapeutic Application. By Angelo Mariani. With illustrations. Third edition. New York: J. N. Jaros, 52 W. 15th Street. 1896.

Transactions of the First Pan-American Medical Congress, held in the City of Washington, D. C., U. S. A., September 5, 6, 7 and 8, 1893. In two volumes. Edited by Charles A. L. Reed, M. D., Secretary-General, Cincinnati, O. Washington: Government Printing Office. 1895.

Diets for Infants and Children in Health and Disease. By Louis Starr, M. D., Editor American Text-book of the Diseases of Children. Price, $1.25 net. Philadelphia: W. B. Saunders, 925 Walnut Street. 1896.

Dame Fortune Smiled: The Doctor's Story. By Willis Barnes. Cloth, $1.25; paper, 50 cents. Boston, Mass.: The Arena Publishing Company, Copley Square.

Voice Building and Tone Placing, Showing a New Method of Relieving Injured Vocal Cords by Tone Exercises. By H. Holbrook Curtis, Ph. B., M. D. Fellow of the New York Academy of Medicine; Fellow of the American Laryngological, Rhinological and Otological Association, etc. Pp. 227. Illustrated. New York: D. Appleton & Co. 1896.

The National Dispensatory with Supplement embracing the new edition of the National Formulary.—The National Dispensatory. Containing the Natural History, Chemistry, Pharmacy, Actions and Uses of Medicines, including those recognised in the Pharmacopeias of the United States, Great Britain and Germany, with numerous references to the French Codex. By Alfred Stille, M. D., LL. D., Professor Emeritus of the Theory and Practice of Medicine and of Clinical Medicine in the University of Pennsylvania; John M. Maisch, Phar. D., late Professor of Materia Medica and Botany in Philadelphia College of Pharmacy, Secretary to the American Pharmaceutical Association; Chas. Caspari, Jr., Ph. G., Professor of Pharmacy in the Maryland College of Pharmacy, Baltimore, and Henry C. C. Maisch, Ph. G., Ph. D. Fifth edition, thoroughly revised in accordance with the new U. S. Pharmacopeia (seventh decennial revision) and embracing the new edition of The National Formulary. In one magnificent imperial octavo volume of 2025 pages, with 320 engravings. Cloth, $7.25;

leather, $8.00. With Ready Reference Thumb-letter Index, cloth, $7.75; leather, $8.50. Philadelphia and New York: Lea Brothers & Co., Publishers. 1896.

International Clinics. A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Genito-urinary Surgery, Gynecology, Pharyngology, Rhinology, Ophthalmology, Laryngology, Obstetrics, Otology and Dermatology. By professors and lecturers in the leading medical colleges of the United States, Great Britain and Canada. Edited by Judson Daland, M. D. (Univ. of Penna.), Philadelphia, Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania; Assistant Physician to the University Hospital; Physician to the Philadelphia Hospital and Fellow College of Physicians, Philadelphia. J. Mitchell Bruce, M. D., F. R. C. P., London, England, Physician to, and Lecturer on, the Principles and Practice of Medicine at the Charing Cross Hospital. David W. Finlay, M. D., F. R. C. P., Aberdeen, Scotland, Professor of Practice of Medicine in the University of Aberdeen; Physician to, and Lecturer on, Clinical Medicine in the Aberdeen Royal Infirmary; Consulting Physician to the Royal Hospital for Diseases of the Chest, London. Volume IV. Fifth series. 1896. Royal 8vo, pp. x.—363. Philadelphia: J. B. Lippincott Co. 1895.

Tenth Annual Report of the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania. Benjamin Lee, M. D., Secretary. Philadelphia: Clarence M. Busch, State Printer. 1895.

Fifteenth Annual Report of the State Board of Health of New York. Including eighteen maps. Transmitted to the Legislature March 6, 1895. Albany: James B. Lyon, State Printer. 1895.

Literary Notes.

THE *Peoria Medical Record* is the name of a new journal that appeared February 15, 1896. It is a well-printed periodical and its arrangement is excellent. Dr. W. R. Allison is announced as the editor and Dr. C. H. Brobst is the managing editor.

THE *Peoria Medical Journal*, that was published for some years and then discontinued, has been revived under its former editor, Dr. Thomas M. McIlvaine. The April issue presents a comely appearance and we wish it success.

THE *Virginia Medical Semi-Monthly* has appeared in place of the *Virginia Medical Monthly*, and is a handsome quarto with double-column pages. Dr. Landon B. Edwards, the veteran editor and

proprietor, continues at the helm, which is a guarantee of the success as well as excellence of the new journal.

The following reports have been received: Eleventh annual report of the New York Post-Graduate Hospital; Twenty-fourth annual report of the Cincinnati Hospital; Report of the Dayton, O., Public Library and Museum; Annual report of the State Board of Charities; Statistics of the Trade and Commerce of Buffalo for the year 1895, issued by the Buffalo Merchants' Exchange. These are all interesting reviews of the work of these several institutions and corporations for the year.

Messrs. Reed & Carnrick, of New York, have recently issued a brochure, entitled *Protonuclein Clinical Records, No. 2.* These records contain reports from leading physicians in hospitals and private practice, showing the favorable action of protonuclein in a large group of diseases. They also contain much valuable information as to indications for its use, dosage and methods. The pamphlet will be supplied on application to Messrs. Reed & Carnrick, 426-428 W. Broadway, New York.

We are indebted to Messrs. Mariani & Co. for an interesting treatise entitled Coca and its Therapeutic Application. It is written by Monsieur Angelo Mariani, of Paris. It is beautifully illustrated, printed on handsome book paper, bound in dark blue muslin and contains the entire history of this valuable plant. It also treats of the physiology of coca and of its application in the treatment of the several diseases wherein its use is justified.

This admirable little book is published by Mr. J. N. Jaros, 52 W. Fifteenth street, New York, who will supply it gratuitously to physicians on application.

The April *Monist* is replete with articles of philosophical, sociological and scientific interest. It opens with two articles on Röntgen's X rays, by leading European scientists. Edward Atkinson writes on the Philosophy of money; Professor Le Conte contributes From animal to man, and Professor Clark Murray on the Dualistic conception of nature. A number of other articles of interest are printed. It is published by the Open Court Publishing Co., Chicago, at $2.00 a year.

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Original Communications.

A CASE OF RETROFLEXION OF THE GRAVID UTERUS

COMPLICATED BY HYPERTROPHY OF THE PORTIO SUPRAVAGINALIS AND PERIMETRITIC ADHESIONS.

From the I. Obstetric University Clinic of the Professor, Dr. F. Schauta, in Vienna.

BY DR. GABRIELE BARONIN POSSANNER, Vienna.

Translated by DR. MAUD E. ABBOTT, Montreal.

IN THE study of obstetrics I have often remarked the relatively slight attention given by most authors to the influence of anomalies of the soft passages upon the course of labor. This fact is still more surprising when one considers the frequency of the occurrence of such anomalies on the one hand and on the other the importance of this influence on the course of labor. Led by these considerations, I have accepted the invitation of my honored chef professor, Dr. Schauta, to describe a case of this kind which I had the opportunity of closely observing in his wards. I have been still more encouraged to do this by the fact not only that this case is in itself an extremely interesting one but also because I have not been able to find any report of an exactly similar case in the whole range of accessible literature:

Frau T. K., aged 21, III. para, of Vienna, was admitted to the clinic on May 1, 1894, with the above diagnosis. The personal history gives the following facts: Until three years ago the patient had been always healthy; neither has she, as far as can be ascertained, a hereditary predisposition. Menstruation began at the age of twelve years, was always regular every four weeks; it was accompanied by colicky pains in the abdomen and lasted from three to four days. Three years ago the patient had suffered an abortion, which was followed by an attack of puerperal childbed fever, lasting six weeks. Frau K. was at that time under treatment in the Rudolf hospital. Cold douches were used and cold applications to the abdomen, whereupon the patient's condition

improved greatly, so that, according to the statement, she was fit to be dismissed after six weeks' treatment. In January, 1893, took place, at the normal end of pregnancy, the spontaneous birth of a fully-developed living child; but again, during the lying-in period, an inflammation of the uterus set in, which obliged the patient to seek admission at the Wilhelminen hospital. Again douches and cold applications to the abdomen were ordered, and the patient states that after six weeks' treatment she was discharged "cured," and felt perfectly well until three months ago. At that time pains set in, in the lower part of the abdomen, on both sides. The patient also complains since then of a feeling of pressing down and burning in the abdomen, and menstruation has not occurred since that time. The pains ceased during rest in bed in the dorsal position and increased greatly with every active movement, especially upon exertion of the abdominal muscles, as in defecation and also in the passage of urine, which does not take place without a certain amount of straining. About three weeks ago a slight hemorrhage took place from the genitals, directly after the patient had lifted a heavy weight and at the same time she noticed a small tumor protruding from the vulva. Since that time the patient has had a feeling as though the womb had fallen.

Status clinicus on May 1, 1894.—Medium-sized, well-nourished woman. The thoracic organs show normal condition. The mucous membrane of the genital organs is discolored, livid and there is a slight discharge. Before the vulva lies a tumor (prolapse) the size of an apple, of a bluish-red color; on the portio are places covered with a dirty deposit. The corpus uteri is distinctly enlarged and in retroversion. The column is very much elongated. The corpus uteri corresponds in size to a pregnancy of the fourth lunar month. Internal examination shows the portio elongated and deeply lacerated. A very soft tumor, about the size of a child's head, is felt in Douglas's sac. The fundus uteri is not palpable; both adnexa are normal; the corpus uteri can easily be raised out of Douglas's sac.

On May 7th.—The uterus extends four finger breadths above the symphysis and has the consistence of a pregnant uterus; there is tenderness to pressure over the tumor and on its lateral borders. The tumor protruding from the vulva shows a transverse fissure; its anterior surface is of a scarlet color, granular and passes over posteriorly into a smooth surface.

With regard to the etiology it may be remarked that the puerperal illnesses described by the patient are to be considered as attacks of perimetritis, as remains of which adhesions exist, through which the uterus is fixed. The portio vaginalis, respectively supravaginalis, which is, in consequence of the blood and lymph congestion, extremely elongated and hypertrophied, cannot advance upward, because of the fixation, and must therefore, in consequence of the pressure of the continu-

ally enlarging pregnant uterus, give way below as the point of least resistance. (Fig. 2.)

The retroflexed uterus can now be replaced only with the greatest difficulty and the pessary used after replacement falls out again after twenty hours. Quite as unsuccessful was the application of wadding tampons, supporting bandages, and the like, the execution of which the patient went through with the greatest patience.

In the course of the patient's stay in the clinic the prolapse became considerably larger, in spite of continuous rest in bed on her part, and at the same time her sufferings increased greatly. Especially in the last week of May, tormenting drawing pains set in, in the hypogastric region, which however ceased from time to time. The ulcer on the

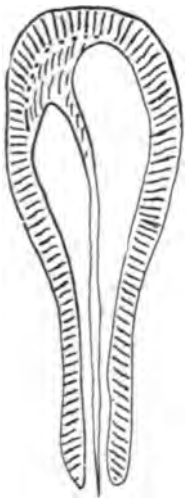


Fig. 1.

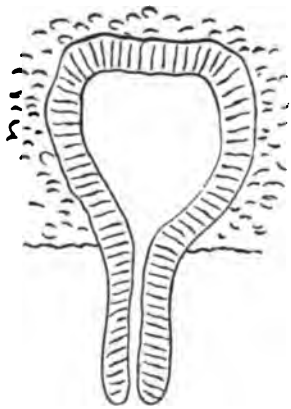


Fig. 2.

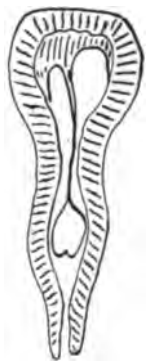


Fig. 3.

portio, which had been covered before, cleaned soon under treatment with a solution of acetate of alumen.

On June 1st.—Strong bearing-down pains in the lower part of the abdomen set in. On this account, and also because at the same time marked difficulties in micturition occurred and the portio threatened to become necrotic, the inducement of artificial abortion was resorted to. At examination on June 1st, at 12 A. M., the following condition was found: the uterine tumor stood 1 fingerbreadth below the umbilicus; respectively, 4 fingerbreadths above the symphysis—that is, exactly as high as at the first examination. The prolapse protruded from the vulva. Its anterior wall measures 10.5 cm.; its lateral walls, each 7 cm.; its posterior wall, 8 cm. The whole portio is covered with a single, circular, deeply-granulated erosion, measuring 7 cm. in sagittal diam-

eter, 6 cm. in transverse diameter. The circumference of the prolapsed cervix is 18 cm., the color of the mucous membrane was light pink, that of the erosion dark brownish red. On internal examination, firm, tense cords, running backward from the upper part of the cervix, were felt, which were very sensitive to pressure. In the same way such cords were felt in the left parametrium; the right parametrium was in its whole extension much shortened and very resistant.

Inducement of artificial abortion was undertaken on June 1st, at 12.30 P. M., by the introduction of an elastic bougie. The bougie entered easily and without resistance as far as to its end. An iodoform dressing was then applied. Toward evening slight labor pains set in. On June 2d, removal of the first and introduction of a fresh bougie. Toward evening, pains again set in. The night, however, was free from pain. In the morning, strong, persistent pains and some passing of blood. Bougie removed. During the night of the 3d of June there were moderate labor pains. In the morning of June 4th the prolapsed part appeared markedly shortened and somewhat bluish, discolored. During the day there had been very little abdominal pain. On the 4th of June, at 6 o'clock in the evening, introduction of a new bougie and an iodoform protecting bandage was applied. Throughout the following night the patient had very strong pains. On June 5th, 12.30 P. M., the fruit could be felt, about 3 cm. from the external os. The prolapse had retracted to about 3.5 cm. (Fig. 3.) On the 5th of June, at 2.30 P. M., after several strong labor pains the fruit was at last born, head first.

As the placenta was not yet delivered at 8 o'clock in the evening, and as a profuse hemorrhage began, manual extraction was resorted to. This was found to be very difficult on account of the length and slight elasticity of the cervix (9 cm.) (Fig. 1), and of the extremely firm, cord-like adhesions of the placenta to the fundus uteri. Finally entire evacuation of the uterus was successfully carried out, but the placenta could only be removed by pieces. When the removal of the placenta was finished, another hemorrhage set in, which was stopped by an irrigation with lysol and tamponade of the uterine cavity.

On June 6th the prolapse had entirely withdrawn itself through the vulva, also remained replaced during the following days. In order to assist involution of the hypertrophy by moderate pressure, as well as to induce fixation in the normal position, the vagina was well tamponed, iodoform gauze and a protective bandage applied. The tamponade was renewed twice a day. There was very little secretion.

On June 10th the tampon was pushed out by the prolapse before the vulva. The tampon was renewed. General condition was very good. A stool followed an enema without any difficulty.

On June 11th the patient complained of painfulness of the cervix during the introduction of the tampon. The tamponade was therefore stopped. In spite of this the prolapse still continued replaced during complete rest in the dorsal position.

During the following days pains of every description had completely disappeared, the patient felt very well and the prolapse remained, without tamponade, continually in position. Lochia very scanty, purulent.

Examination on July 4th gives the following conditions: portio hypertrophic, the size of a walnut, lacerated, external os a transverse fissure, closed, not eroded. Posterior fornix of vagina very sensitive to pressure. Passing backward from the cervix cord-like resistances are plainly felt, which are also sensitive to pressure. The uterus is in retroflexion, is however easily replaceable, it is somewhat enlarged, of normal consistence, adnexa on both sides normal. During defecation or other straining of the abdominal muscles the anterior wall of the vagina and the cervix prolapse as far as the introitus vaginal, without however passing out of it. Condition of the patient, otherwise, perfectly normal.

If we now sum up the above-described case, it may be stated in a few words somewhat as follows: A 21-year-old patient had, three years ago, an abortion, fifteen months ago a birth at the normal end of pregnancy. Each time a perimetritis set in during the lying-in period, which yielded to the treatment employed, at least as far as acute symptoms are concerned. Patient was dismissed both times cured, feeling perfectly well. The consequences of both puerperal illnesses first became apparent when a new pregnancy occurred and enlargement of the uterus began. Then pains set in, in the back and abdomen, caused by the tension which the already somewhat tense and stretched adhesions suffered through the upward extending uterus. The uterus was forced by the progress of pregnancy, at the impossibility of advancing upward, to give way below, at the point of least resistance. Marked blood and lymph stagnation, caused by the abnormal conditions of pressure, developed, especially in the lower parts of the uterus, and in consequence the great hypertrophy and elongation of the portio vaginalis, respectively supravaginalis, ensued. At the same time the portio is continuously pushed downward and appears, apparently in consequence of a straining of the abdominal muscles, before the vulva. In addition to the congestion and abnormal pressure, mechanical insults to the greatly hypertrophied portio followed, an erosion of great extent takes place, which at the time of the patient's admission to the hospital was covered by diphtheritic masses. The deposit disappears very soon under treatment with aluminum acetate, but the erosion, in spite of the most careful treatment, not only persists, but also increases greatly,

so an extensive part of the surface of the portio appears scarlet and very uneven. Finally, incarceration symptoms set in, the portio threatens to become necrotic, and in consequence artificial abortion was then induced. Noteworthy still is the mode of exit of the fruit, respectively, the condition of the portio during labor. The latter became, indeed, much shortened, could however not retract completely over the fruit, which must therefore widen the passage by degrees under the influence of strong labor pains. The third stage—placental period—lasts exceptionally long and must be ended by operation. In childbed, recovery rapidly advances, the portio decreases markedly, erosion soon disappears completely, there remains only a moderate hypertrophy of the portio and a slight prolapsus uteri.

WASAGASSE 2.

COLLEGE LIFE FOR WOMEN TWENTY YEARS AGO.

BY MARY BLAIR-MOODY, M. D., New Haven, Conn.

EARLY in the autumn of 1874 the majority of the faculty of the medical department of the University of Buffalo decided to favorably consider an application made some years before by a woman resident of their own city, to pursue the study of medicine in their classes on the same footing as the male students. Sex was to be left out of the question as much as possible. The minority, finding it difficult to wholly approve, yielded with true American spirit, and also welcomed the innovator with what grace they could command. My youngest brother, then about passing out of his teens, having just previously decided to pursue the study of medicine in that institution, became a member of my family, and together we went into the search for the precious possibilities of the healing art. Every day we measured our work, not by what was required, but what was possible to be done, making that also include the required. The personnel of the faculty at that time always recurs to my memory as being of a somewhat unusually high order. There was a keen love of truth among them for its own sake.

Two of them said to me at different times in the course: "Do not believe what we tell you in medicine or what anybody says until you prove it." All did not teach in that way for obvious reasons, especially the demonstrator in anatomy. It would be impossible. Prof. Hadley's classes in chemistry had been and

continued always open to women. Not only so, women were cordially welcomed and encouraged to do the best work of which they were capable. Dr. Mason frequently had women visitors in his physiology classes and delighted in enlightening them on such practical points as choice of food, respiratory mechanism, effects of certain nervous lesions and similar branches of the subject.

After being well started in my work, and having become quite enthusiastic over the clearness and elegance with which the professor of surgery, Dr. Moore, instructed his classes, I chanced to be in one of the other professor's rooms when he entered without noticing me and exclaimed: "How is this that we have a woman here?" Dr. Potter entered at that moment and replied: "I assume the responsibility." He was Dean at that time, and one of them, I do not remember whom, remarked: "If we do not like it when she gets through we can close the doors." They have never been closed; but, nevertheless, it is my impression that it is liable to remain what it was in the beginning, a man's college, courteously conceding as a privilege to women advantages not taken into account by its charter members. This has its uses; chivalry on one side and gratitude on the other are encouraged. It is like a bit of the romance of the middle ages dropped into the life of a wide-awake, not to say prosaic, American city. Some of the professors said when they decided to leave the doors open to women: "It shall never be a woman's college. If they wish to study as the men do, well and good. We shall not advertise it as a college admitting women, nor make special arrangements for them, nor consult their convenience." One of the professors who took this stand and maintained it expressed at one time a thought which is shared by too many and is mentioned for that reason, "No lady will wish to study medicine," with the emphasis on lady.

To be a lady in the truest sense of the word is the worthy ambition of many American women. To be so called without possessing the qualities is scarcely a courtesy.

However it may be in other medical colleges, the last or present class is always the best in the speech of the professors. It is like the last new baby. So my class, that of 1876, took its turn in being the very best.

It was a question in my mind soon after entering how to manage, when the government is vested in the students themselves, as it is, to a great degree, in colleges of that sort. Watching for indications as to methods or ways in which to maintain my dignity

as a member of the class, I soon felt that there was a majority of the students that would intelligently sustain fair play in the matter. That was a great help to me. What I would have done had that sentiment not prevailed in the class I do not know. I am sure that this sentiment also prevailed among the professors. There were a few rough fellows in the class who occasionally called my attention to themselves by cat-calls when I entered, excessive smoking at the recess, close to my seat, and other manifestations of ill-breeding. The class endured it for a while in silence, simply attempting to frown it down. It happened, however, one day that one of the ringleaders in this movement was discovered in some such trick, I do not know just what, and was doubled up and handed over the tops of the iron seats from one man to another from the back row right down to the desk and rolled over that in no gentle manner to the lecturer's usual place. The quietest, most scholarly and most gentlemenly men in the class took hold with a will and received him with open arms as he was handed along too rapidly to help himself, starting as he did doubled up like a jack-knife. This happened just before lecture time. It was done quite sternly, almost silently, and must have required no small amount of muscular force, as he was not a slight fellow to whom this dose was administered. It amused me greatly, as the man seemed to shrink from attracting attention to himself in any way afterward. It may be needless to say that he was not one of those that passed when it came to final examination. Flying overshoes was another sport that was engaged in by the students, but only occasionally did they come my way. Once when one did come I put my foot on it and there it remained through lecture time and until the owner came and asked for it.

It was my fortune to confiscate a good baseball once that came flying down my way when I was in my seat waiting for the lecture to begin. The boy who owned it playfully regained possession by virtue of superior muscular strength as we passed out of the hall after lecture. I wished them to understand that confiscation would be the rule if such things came my way, as I did not wish to engage in such recreations then and there. I think they did so understand it after the ball episode, though almost nothing was ever said on such subjects. John, the janitor, was my faithful friend through it all. He was always interested in my work, kind and helpful. Among the boys he had the reputation of being afraid of nothing, living or dead. He, too, liked to see fair play,

at least so far as I was concerned, and occasionally so expressed himself to the students in his own inimitable way. "She pays her money like the rest," he said to one rough student one day. "She has just as good a right here as any one." But there were limits, by common consent apparently, to my privileges. It was to be fair play but no favor on account of sex. Our professor in medicine, magnanimous and courteous as he was to all, once overstepped the bounds, according to class sentiment. We were studying diseases of the chest under his instruction. A prize had been, or was to be, offered for the best report of a certain set of lectures on this subject. Perhaps to try the temper of the men and their opinion on the subject, he called me out at several successive clinics to make the chest examination, which was a coveted privilege and could not well be accorded to every one. About the third time a hiss of disapproval was sufficiently expressive to convey the class sentiment of fair play and no favor. A shorthand man took the prize for best report of those lectures, and also those of Dr. White on some obstetrical subject, what I have now forgotten.

One of my little lads, I gathered five about me, and one baby girl, when at home, would sometimes drive down for me at the close of our longest lecture days. It was an amusement of some of the students, or would-be students, if he came in a little before the last lecture closed, to be in the back row of seats, where he always sat, and take off his shoes and stockings. Of course, he would not be just ready when I wanted to go home. Though I was hindered a little sometimes in different ways, there was never a time when some one would not move back and give me a favorable place in the standing clinics. They could look over my head.

Dr. Hadley counseled me sometimes, sometimes gently criticised, but was understood by the class to be on the whole friendly to my work. He said to me in the beginning: "It will be easier for you to get along if you occupy yourself in lecture time by taking copious notes." Although I did not presume to compete for it, this brought me the prize in minor operative surgery, as it was given for the best reports of a long course of lectures and the shorthand men did not enter into the competition.

It was necessary to have the notes copied and in the hands of the judges on a certain Monday afternoon. As I had abandoned all thought of competing for this prize early in the term, I had not copied them. Saturday Dr. Potter called and asked me to copy them and put them in. It was then nearly noon. I immediately

set about it and wrote until five o'clock Sunday morning. With as little sleep and rest as possible, the notes were not quite finished Monday noon. A clerk in my husband's employ and my brother then took hold and by four o'clock they were completed. I have since regarded this as a justifiable exception to the rule of regular sleep and rest. The temporary inconvenience which was necessary to win, was too brief to induce serious consequences. At graduation the announcement was received with rather more than the usual cheers and congratulations, six little pairs of hands in the gallery joining in the applause. As I write, the veil of years is lifted and I recall with pleasure many kindly and helpful words and acts from my teachers and associates which cannot here be written.

The greatest good to the greatest number at the smallest cost to them, was somehow inculcated along with other teaching. That principle closely followed does not tend to the accumulation of wealth.

Few, if any, of the professors remain on the faculty who were there when my class graduated in '76. Some of their places are filled by men beside whom I studied, some from the later classes, others have come from afar. The new building in closer proximity to one of the hospitals is more convenient and suitable for the numbers of women as well as men who yearly gather there for instruction. Many of the old professors have long rested from their labors, crowned with that youth which is immortal. But their precepts and examples have been good to work by. Not one of them would I have willingly exchanged for any other teacher in his department. How vividly they come to my mind day by day as I meet emergencies in practice, against which, to be forewarned, as it were, is to be forearmed. I remember well how conservatively the first of the coal products was handled by our professor of practice, who departed from his usual custom in using a remedy so purely chemical in construction and yet so complex. To me, and I believe to all, the truth was carefully imparted so far as it was known.

Once the fees were paid and the work begun there seemed to be no calculation that so much money demanded so much and no more instruction. Capacity, desire and opportunity were the only recognised limits and we were each and all encouraged to do and dare our very best.

FAIR HAVEN HEIGHTS.

SOME LESIONS OF THE PELVIC VISCERA NOT REQUIRING OPERATIVE TREATMENT.

By BINA POTTER-VAN DENBERGH, Dansville, N. Y.

CONSTITUTING a large part of what the busy gynecologist terms his "office work," are the nonoperative cases of pelvic disease, chronic, painful and tedious.

These cases are interesting in two lights: First, because of the prognosis, which must be reasonably frank to satisfy the patient, who, afflicted by much suffering and often by many physicians, is in a position to demand at her first consultation some statement as to the curability of her disease and the length of time necessary for the relief of its symptoms; and, secondly, because a case of this kind is sure to bring a rich reward in gratitude to the physician skilful enough to make a favorable prognosis and a restoration to health one.

In this list no mention will be made of those unnumbered cases where the various neuroses of the pelvic viscera are but reflexes from other diseased organs, when the woman is sick, not because she has a womb, but because her general health needs care and attention.

Nothing is quite so trying as the patient who insists that every ill flesh is heir to is attributable to her generative system, and whose faith and confidence are for that doctor only who yields to her opinion. These cases are legion and offer a large and remunerative field of work for the physician who permits the patient to make the diagnosis, or who fails thoroughly to investigate the sources of pain; for be it said to the honor of these cases, there is pain, often of a violent and distressing character. Many times, too, the real situation is masked by the existence of a condition of the pelvic viscera, that seems at first sight to be the source of the ill-health.

A notable case of this kind came under my care in June, 1895. The patient had slight bilateral cervical laceration, cervical erosion and endometritis.

In July I curetted the uterus, packed it with iodoform gauze and repaired the torn cervix. Patient made an excellent recovery and was slightly better of her pelvic engorgement for two months, when all her old symptoms returned in full force; the violent pelvic ache, the pain and dragging.

Here was evidently a case of double conditions. Under proper

treatment directed to the liver and kidneys, with open air exercise, this patient improved and she is now enjoying her freedom from certain nervous conditions, a result due, no doubt, to the relief of pelvic irritation.

Many times these cases might yield most brilliant results under the surgeon's hands, but the patient's fear and abhorrence of an "operation" lead her to try to reach the goal of good health through any by-path rather than to endure the shorter road to freedom.

Then, again, we weigh carefully many of these cases and cannot conscientiously predict such excellent results as will encourage the patient to undergo operative relief.

Although the universal tide of opinion against wholesale oöphorectomy has possibly swung the pendulum too far, it is yet a sentiment in the right direction; for we have not cured a diseased organ when we have cut it off or cut it out, and time has very conclusively proven that, in a large number of cases, the removal of the ovaries has entailed a far worse state of health than the condition which led the patient to consult the doctor.

Very much of the surgery of the female pelvic viscera must necessarily be experimental, for, as a noted gynecologist very recently remarked, "We are daily learning by our blunders," and when one considers the operations and the modifications of operations done upon these organs, one can but wonder when, if ever, pelvic surgery will become a finished art.

It seems a discouraging process to attempt to relieve a case of displaced and adherent tubes and ovaries by any other method than breaking up the adhesions and removing the diseased tissues, if need be. Very often the patient has fixed ideas as to the ways and means of her recovery, and it is of these cases I write.

In October, 1894, Mrs. M. consulted me, on the advice of her family physician, who refused any and all operative interference for his patient for a state of health that had interfered with walking for about three months.

At the time of consultation patient was confined to a wheel-chair. The chief seat of pain was in the left thigh and hip, in the region of the sciatic nerve. Patient had received long and vigorous treatment for sciatica, without deriving any benefit. The history of the case was simple:

Excellent health up to the time of marriage at twenty-two; six months after marriage there were rather vague symptoms of pelvic

disease, which increased for three or four years under varying forms of treatment.

Five years after marriage the patient consulted a specialist for her sterility, which was attributed to cervical stenosis; an operation (probably dilatation) was performed for its relief. Following operation was a sharp inflammatory reaction and to it the patient attributed all her subsequent ill health.

On examination the right tube and ovary were found slightly enlarged, displaced and somewhat adherent, not particularly tender. The left side of the pelvis was the chief object of interest, as it also appeared to be the chief factor of ill-health. Here the tube and ovary were evidently imbedded in a mass of exudate, as nothing could be mapped out or distinguished with the examining finger and any bimanual pressure caused such intense pain, that I was obliged to desist. Uterine body deeply engorged; bimanual, with one finger in rectum, showed it to be highly sensitive throughout, retro-displaced in second degree, not movable. Sound showed the depth to be but a trifle over the normal, endometrium deeply engorged and highly sensitive. Was obliged to give morphia to allay the pain subsequent to examination.

Fearing the possible presence of pus, I began treatment very cautiously; commencing first with vaginal applications of Churchill's tincture of iodine, followed by light tamponing with lamb's wool soaked in boro-glycerine this was followed, on its removal, by the prolonged hot douche. At the end of the first week began using the galvanic current, at first very lightly as patient seemed unable to bear a strong current, and owing to the severe pain used the positive pole in the vagina, the negative plate over the abdomen. After the fifth treatment I changed the method of application, using the negative pole over the region of the exudate in the vagina and placing the positive plate over the abdomen.

This treatment was continued for three months without interruption, gradually increasing the strength of the current as the patient could bear it up to eighty milliampères, beyond which I did not go.

In conjunction with the galvanism the patient wore the vaginal tampons of wool, dipped in boro-glycerine, had the prolonged hot douches and received daily massage, especial care being given to the affected limb.

First, improvement was noted in the ability to stand or bear her weight on left foot without much pain; then greater mobility of the limb under the hands of the masseuse, and lastly in walking.

To the bimanual examination the exudate showed gradual resolution, the uterus became more movable and the tenderness very largely disappeared.

While the patient left my care feeling that she was cured, and has subsequently led a very active life, riding a bicycle with freedom and enjoyment, she no doubt bears still the traces of long illness; yet is perhaps stronger and is certainly happier than any operative treatment could have made her.

Though totally ignorant of the fact, this patient was the victim of gonorrhea acquired in early married life and to this fact I attributed her sterility.

My second case was a young woman aged 27, married seven years and sterile. She came to me complaining of severe dysmenorrhea, but really seeking relief in the hope of pregnancy.

On examination the uterus was found sharply anteflexed; sound could be passed with great difficulty after drawing down the cervix firmly with a tenaculum. I found no disease or tenderness of the adnexa, nor did the patient give any history of previous pelvic disease.

Under an anesthetic, and with thorough asepsis, the uterine canal was dilated, irrigated and curetted, using the sharp curette. The cavity was then, after thorough irrigation, carefully packed with iodoform gauze and a vaginal dressing used of iodoform and boric acid.

On the fifth day after the operation the gauze was removed, having been nearly all discharged into the vagina; vagina was thoroughly cleaned and a fresh strip of iodoform gauze carried to the fundus. This procedure was repeated twice, at intervals of three days each, when it was interrupted by the normal appearance of menstruation.

The patient made an excellent recovery, and left my care six weeks after the operation. Three weeks later her home physician wrote me that she had pelvic peritonitis, and three months after leaving the hospital she returned to my care with a well-marked case of right salpingitis, with surrounding exudate.

Dr. Mann saw this case with me in consultation and thought it the result of gonorrheal infection, but conditions could not bear out this suspicion. After the consultation this patient was at once placed on the galvanic treatment, with hot douches and ichthyol tampons.

At the end of two months the patient left me in excellent

health. There were no signs left of the exudate, nor was there any pelvic tenderness.

The anteflexion had been converted into a rather marked anteversion, the sound passing readily to the fundus. This patient reports herself in excellent health, though, I deeply regret to say, still sterile.

The third and last case of this series was a patient who consulted me three months after curettement, which had been done to relieve a rather slight dysmenorrhea.

Patient single, aged 33, had been actively engaged in her profession, which was journalism. Previous health excellent.

So far as learned from her history the curettement was of the ordinary variety and without complication, recovery good. Tenth or twelfth day after the operation, following a short carriage ride, patient was seized with violent pain in the right side of pelvis extending down the thigh. Acute pain continued for several days, not very much relieved by the various forms of treatment, the limb meantime becoming flexed. Patient was placed upon local treatment consisting in the application of some medicated glycerine.

At time of the consultation the weight could be borne for a few minutes, but walking was impossible. Bimanual examination showed the right ovary enlarged, prolapsed, immovable and intensely sensitive. Left ovary prolapsed slightly to left of uterus, not sensitive. Uterus sensitive when lifted on examining finger, no discharge, depth and axis normal. The patient was very sure she would not be able to take any treatment as she was so "sore" and had already endured so much.

This case was given daily massage, gentle manipulation of the limb at first, an occasional sitz bath when the pain was particularly severe, and for a time daily, vaginal tampons of wool, saturated in ichthyol, with, of course, the daily hot douche.

At the end of four months the patient walked with ease, there was but slight pain in the hip and then only occasionally.

The pain and tenderness in the pelvis had wholly disappeared; right ovary freely movable; uterus no longer sensitive to bimanual manipulation, and the exudate surrounding it had disappeared. Patient was sent to the sea shore to tone up her general health and get ready for her previous occupation.

Time and patience would seem to be the moral. These are not always attainable, but in well-chosen cases proper care will usually do credit to the physician's favorable prognosis.

A CASE OF EXTENSIVE CEREBRAL SOFTENING.[1]

By HELENE KUHLMANN, M. D.,
Assistant Physician, Buffalo State Hospital.

THE reasons for reporting the following case are the extent of the lesion and the peculiarity of the manner of invasion of the different areas of the brain, which was very systematic and showed several points of interest:

Mrs. A. D., age 53; widow; nativity, England; number of children unascertained; no insanity in family as far as known; habits good; no history of syphilis.

She was admitted to the Buffalo State Hospital on January 5, 1894, suffering from terminal dementia of about thirteen years' duration, the history accompanying her being very scanty and incomplete. Physical condition on entering was poor; she was feeble, anemic, and was suffering from general atheroma. Heart was rapid and irregular; there was no murmur; pulse tense; tongue deviated slightly to the right; pupils were dilated and equal; gait normal, no paralysis of limbs.

She was controlled by delusions of grandeur; believed that she was Queen Victoria, that she possessed unlimited power, could command people to be executed; mistook the identity of physicians, nurses and patients; was often noisy, profane and obscene, and assumed a threatening attitude if anyone approached her. Had evidently marked hallucinations of hearing.

Her general condition remained unchanged until the morning of November 20, 1895, when she had a convulsion, followed by temporary loss of consciousness. The facts as related by the nurse are as follows: Patient ate her breakfast as usual at 7 A. M., showing nothing abnormal. A few minutes before 8 she lay down on the couch, being somewhat pale, and at 8 she had a convulsion, unaccompanied by frothing at the mouth. Unconsciousness lasted about 20 minutes. On examining her one hour later, the right arm was found to be paralysed; no other focal symptoms.

November 21st—Still unable to use right arm; speaks plainly; is hilarious and emotional; pupils are normal; has repeatedly gotten up out of bed and walked around the room; swallows well.

November 22d—This morning entire right side of the body is paralysed. Lines of right side of the face are obliterated; corner of the mouth drawn to left; ptosis of right lid; in addition to paralysis, anesthesia of right arm and leg; is very stupid; speech indistinct. Patient had been unusually quiet during the preceding night, and there had been no report or evidences of further convulsions. The paralysis gradually deepened during the succeeding days. On November 26th,

1. Read before the Physicians' League, April 6, 1896.

patient was utterly helpless, unable to move, swallowing with great difficulty; there was complete aphasia and paralysis of the sphincters of bladder and rectum. She remained in this condition until death occurred on the morning of the 28th. The autopsy was performed twenty-five hours after death, and was confined to examination of the brain. The calvarium was found slightly adherent; dura mater congested; no effusion. Arteries everywhere atheromatous, especially the posterior cerebral on the left side and the posterior communicating. Patches of atheroma irregularly distributed throughout the circle of Willis. The middle cerebral on the left side was extremely atheromatous, the patches being especially marked at the bifurcation of the fissure of Sylvius, where the artery divides into its principal branches. At this point a clot was found, about the size of a pea, completely filling the lumen of the vessel. It was dark red in color and partially organised. The white matter of the left side showed extensive white softening, especially marked in the temporo-sphenoidal lobe, the third frontal convolution, the occipital lobe and the posterior inferior parietal lobe. The brain tissue was opalescent and showed an absence of the puncta vasculorum, which gave the brain a marble-like appearance. The gray matter of the left side had undergone so much disintegration that its thickness could not be accurately ascertained, but it was considerably decreased. The right hemisphere was comparatively normal, with the exception of the atheroma, which was not as marked as on the left side.

The points of interest in the case are, in the first place, the manner of onset, which on the first day looked like that of embolism and on the third day certainly gave the impression of cerebral hemorrhage, considering the complete hemiplegia. It shows how difficult it often is to differentiate accurately between hemorrhage, embolism and thrombosis. On considering the symptom complex further, we find that it corresponds exactly to the nature of the lesion. Softening evidently first occurred in the motor area, supplied by the second and third branches of the middle cerebral artery and the first center affected was that of the arm. A day elapsed before the softening of the leg and face centers had become complete, and about the same time softening of Broca's convolution, supplied by the first branch, the inferior frontal, had reached its completion. The softening of the occipital and temporo-sphenoidal lobes shows that the blood supply of the posterior cerebral was very insufficient, and we have seen that it was in a state of advanced atheroma. The degeneration of the gray matter was, of course, produced by the cutting off of the supply of the nutrient arteries.

Whether the patient's mental condition on admission—the dementia—had been caused by an embolus or thrombus at some previous time, as might be indicated by deviation of the tongue, could not be ascertained, but does not seem at all improbable.

SCHAUTA'S CLINIC—SOME IMPRESSIONS OF INTEREST IN OBSTETRICS AND GYNECOLOGY.

By ELECTA B. WHIPPLE, A. M., M. D., Buffalo, N. Y.

NOTWITHSTANDING the vast opportunities afforded by the clinics of London and other foreign cities, Vienna undoubtedly furnishes the greatest advantages to the general practitioner, as well as to the specialist in every department of medical science.

This is apparent from the large number of students of almost every nationality there congregated for scientific research. Another reason is the unlimited amount of clinical material, and also there are certain forms of disease quite prevalent in Austria and Hungary which the practitioner rarely meets in other localities.

Excellent courses in surgery, gross pathology, bacteriology, histology and general pathology may be had, while special advantages are offered in the throat, nose, eye, ear and skin clinics, and it is doubtful if as good courses in internal medicine can be found anywhere else in the world. Nor is the field in obstetrics less fruitful, since in the three clinics at the Allgemeines Krankenhaus —Schauta's, Chrobak's and Braun's—12,000 births are annually recorded and in Professor Schauta's clinic alone there are yearly 4,000 births. The post-graduate courses in diagnostic and operative obstetrics are many and good, and every phase from the normal, uncomplicated labor to the Cesarean section may be seen. The number of students admitted to a given course is limited—not more than from seven to ten being allowed in the same class.

In the maternity ward, patients in the latter months of pregnancy are daily presented for examination, while on "aufnahme," or reception days, clinics in every stage of labor are present. In all of these cases the external examination for correct diagnosis is regarded of paramount importance and abdominal palpation, with the use of the pelvimeter for recording exact measurements, is practised. In making internal examination, one or two—preferably two—fingers are employed. These examinations are conducted

under the most rigid antiseptic precautions. The hands of the examiner must be cleansed with (*a*) soap and brush, (*b*) absolute alcohol, (*c*) sublimate solution, 1:1000. In this the requirements are most imperative and carelessness is in no degree tolerated. In Professor Leopold's clinic at Dresden, the directions for hand ablution are the same except a second 1:2000 bichloride solution is substituted for the absolute alcohol. In his *Grundriss der Operativen Geburtshülfe*, Professor Schauta advocates the use of alcohol as a disinfectant in obstetric practice because it exerts solvent properties upon the fatty tissues, thus allowing bichloride of mercury to come in immediate contact with the bacteria contained upon the hands.

In the *Deutschen Medicinische Wochenschrift*, 1896, No. 6, investigations conducted by Ahfield and Vahle are described. Ahfield found that alcohol does not act simply by dissolving fatty substances upon the hands, because other agents are more solvent though less antiseptic, but it exerts a direct influence in destroying virulent streptococci. Experiment was made with amniotic membrane to ascertain the influence of alcohol upon such tissues when wet and when dry. Alcohol acted readily when the membrane was moistened, but exerted only feeble influence upon dried tissues. Experiments upon the hands of attendants and nurses demonstrated the value of alcohol as a disinfectant.

An antiseptic vaginal douche is given every patient when labor begins, and as it advances the genitals are frequently bathed with a similar solution. As the head is passing over the perineum, the attendant, by giving it support, uses every precaution to prevent injury and yet the perineum is sometimes lacerated. A report of the obstetrical cases in Schauta's clinic from 1892 to 1894, published in the *Monatsschrift für Geburtshülfe und Gynekologie*, July, 1895, as given by his assistant, Dr. H. von Woerz, in regard to the occurrence of rupture of the perineum, shows several conditions that endanger the perineum by a too sudden passage of the head over it, viz.: (*a*) sudden surprise to the woman as the head is born; (*b*) strong and sudden action of the uterus combined with that of the abdominal muscles when the head is passing the perineum; (*c*) rapid delivery by operative interference; (*d*) small head advancing rapidly and quickly dilating the vulva; (*e*) deformed pelvis in which there may be a large outlet, through which the fetus passes quickly, or owing to an uncurved sacrum and narrowing of the pubic arch, the head tends to be directed more

nearly against the sacral segment of the pelvic floor. He states that: (*a*) in labors the frequency of rupture of the perineum varies directly with the size of the born child; (*b*) ruptures are more common when the perineum is not guarded than when it is; (*c*) by carefully employed protection of the perineum, the ratio between the weight of the child and frequency or extent of the rupture may be considerably modified.

The placenta, in normal cases, is left for nature to expel. If in course of three hours this is unaccomplished, the accoucheur removes it by Crêdé's method.

In placenta previa the Braxton Hicks method is employed and an assistant at the bedside of the patient exercises the strictest surveillance, be it one or several hours until nature performs her work —with the reward of saving mother and child. This is done under thorough antisepsis, as are craniotomies, decapitations, Cesarean sections and all obstetrical operations. No examination of parturient patients is permitted the student within twenty-four hours after he has made one of a patient undergoing operation of fetal decapitation.

In Cesarean section the instruments and hands of assistants and operator are most carefully made aseptic. The operator, clad in large rubber boots and long duck coat, over which is a great rubber apron, sits upon a high stool while operating. The operation is quickly performed and after the different stages are completed, the abdominal wound is closed with superficial catgut and deep silver-wire sutures, secured with glass pressure plates and buttons. The dressing consists of iodoform gauze, a thick layer of carbolised cotton and over all a closely fitting bandage of wadding or unstarched gauze.

In gynecology, as in obstetrics, the material is abundant. Laparatomies are made with the greatest care in every detail. Plastic operations are also made under a thorough aseptic regime, and vaginal fixations are much practised in those cases of retropositions which require operative interference.

Besides the cases for operation there is a large clinic of outpatients who daily present themselves for local treatment, which consists of pelvic massage, vaginal irrigation, tamponage and electricity. Trained nurses are unknown in this clinic, as well as in every other, but here a coarse servant, taught to do the few offices required by the doctor, is present to answer his call and receive any fee with which the students feel inclined to reward her.

In the obstetrical clinic, however, trained midwives—graduates of the school of midwifery which is connected with Braun's clinic—are in constant attendance. In Professor Sänger's private clinic, at Leipsic, pelvic massage is practised and in the polyclinic, which is under his supervision, vaginal irrigation is not only used but the needy out-patients are supplied with irrigators and taught self-use of them. Patients in this polyclinic are shown the greatest kindness and consideration—a virtue which does not always prevail in the charity clinics on the Continent. It has been said, "In Europe, in the great hospitals, the patients are looked upon as material to be shaped and fashioned as the surgeon sees best, irrespective of the patient's feelings."

A feature which particularly impressed me, and, to their credit be it said, was characteristic of the foreign clinics in which I was a student, was the marked respect and profound reverence always accorded the honored chief. Thus, when Professor Schauta entered the clinic room, he was invariably escorted by two or more of his assistants and every student rose in his place and remained standing until the professor was seated. And this instance was not an exception to the universal rule.

491 PORTER AVENUE.

CYSTIC URACHUS.

BY JANE W. CARROLL, M. D., Buffalo, N. Y.

THE patient was first seen March 23, 1895. She gave the following history:

Mrs. B., aged 34, married nine years; no conceptions. Had always had good health and was fleshy until twenty-three years of age, when she began to fail in general health and lose flesh. Had an attack of sharp pain in the bowels, followed by diarrhea. Similar seizures continued off and on for five years and were diagnosticated as consumption of the bowels, sometimes as malarial fever and later as gastric fever. During one attack there was inflammation of the bladder, with deposit of urates in the urine.

During one attack, the year previous, there had been bladder trouble, frequent micturition, with small amount of urine containing uric acid crystals. There was severe abdominal pain this time and the diagnosis was peritonitis.

On March 23, 1895, the patient's condition was a weak one. She was very slender, weighing about a hundred pounds, emaciated, sallow, almost cachectic. Complained of pain in right iliac region, extending

from spine of ileum down to pubes, with great tenderness on palpation. There was also a feeling of soreness in the bladder, frequent micturition, and only a small quantity of urine. The patient was afraid to eat solids, as she thought they increased the pain in the bowels, and had cut down all food to a limited amount of bread and butter.

Examination.—On external palpation of the bowels found great tenderness in the right iliac region, from the anterior superior spine of the ileum to the pubes. Found in the umbilical region an apparent induration or thickening of the abdominal wall, which gave the impression of some abnormal condition. This induration was found extending from the umbilicus for two or three inches to the right and down three or four inches, forming a parallelogram, lying to the right of the median line.

Per vaginam, was found a contracted pelvis, the examining finger touching the promontory of the sacrum very easily. The uterus was anteverted and held firmly in that position by the contracted pelvis, so that the os could not be brought into view by the speculum. The cervix was congested and slightly enlarged and the parts were feverish to the touch. A bimanual examination excluded any connection between the tumor and the uterus. The explanation of the pain and the tumor then seemed to be confined to an appendicitis, floating kidney, or the pain alone to renal colic. As the tumor maintained its position under different attitudes and on different occasions, floating kidney was excluded, although the shape of the tumor was very much like that of a kidney. McBurney's tender point was not noted. The pain was more widespread and the tumor seemed too near the umbilicus to be of appendicitic origin. The thought of a patulous urachus had presented itself, but as bimanual palpation, per vaginam, between bladder and tumor, did not elicit any pain or distress the idea was abandoned. The first examination of the urine for twenty-four hours showed the amount small, only about a pint; a later specimen contained urates. Unfortunately the record has been mislaid or more exact data could be given. While waiting to determine, if possible, the nature of the tumor, attention was directed toward the patient's general health. The kidneys were stimulated, tonics and antilithics prescribed. Also a nutritious, easily digested diet, with the result of great improvement for one week or so. Then a return of the old symptoms, great pain in the right iliac region with temperature 101°. This attack lasted five days, with a return to health for another week. April 11th ushered in

a recurrence with temperature 101°; April 12th, temperature 102°; April 13th, temperature 103°. During this time the patient's mind had been familiarised with the idea that at some time surgical interference would be necessary. The daily increase of temperature, together with a perceptible bulging of the tumor above the contour of the abdomen, also a gurgling on pressure, seemed to indicate that that time had come. Accepting the previous history of inflammation, the theory was plausible that adhesions had been formed between the intestines, omentum and abdominal wall, which caused pain during peristalsis.

The daily rise in temperature now suggested abscess and I requested to be allowed to call a surgeon for consultation. Accordingly, Dr. Roswell Park saw the patient with me on April 14th. As the temperature had now fallen to 100.5°, abscess was excluded. No diagnosis was made, but the patient was advised to go to the hospital for an exploratory operation at least.

This attack subsided in a few days and, after a week of tonic treatment, Mrs. B. entered the general hospital, April 24th, with premonitory symptoms of another attack. April 25th, chloroform having been given, a small incision was made in the median line below the umbilicus, the tissue being very dense and difficult to cut. A sac was cut into, from which some fluid escaped. The incision was enlarged and the examining finger passed into the abdomen. It was found then that the tumor was a cystic urachus; the connection with the bladder could be traced, but a probe could not be passed. This connection was tied off and the cyst dissected out. A number of adhesions had formed between the tumor, omentum and walls of the abdomen and there was considerable soft new tissue formation, rather gelatinous in character. The peritoneum was adherent to the abdominal wall and a considerable piece of both was removed either side of the incision; the abdominal walls could, however, be easily approximated and the wound closed.

The patient made an uninterrupted recovery and left the hospital in two weeks. She has had excellent health ever since, and when last seen—April 9, 1896,—was rosy-cheeked and the picture of health.

The probable explanation of the attacks, therefore, seems to be an oozing of urine into the upper or cystic part of the urachus, and as there was no egress for the fluid once gathered, it was absorbed into the system, causing a toxemia, which would account

for the temperature. The pain was caused by the dragging, due to the distention. Inflammation must have been present some time, and the adhesions and new tissue formation limited the intestinal action to some extent, and gave rise to much the same symptoms that constricting bands will often cause.

285 ASHLAND AVENUE.

RIVERSIDE HOSPITAL.

BY LILLIAN CRAIG RANDALL, M. D., Buffalo, N. Y.

A VARIETY of motives led to the establishment of this hospital in 1892, by Dr. Lillian Craig Randall and Dr. Mary T. Green.

By way of note, the most important was the opinion frequently expressed by brother physicians as well as by women patients, that a woman as resident physician in our hospitals would help to obviate many of the disagreeable features connected with the preparation and after-care of operative gynecology; again, certain surgical experience could only be obtained in Buffalo by women through such a procedure.

These and other motives led to the opening of such a private hospital. Its steady, healthy growth is the reason for its continued existence.

It is thought to be the only hospital controlled and owned by a woman physician, where all general hospital work is done, and in this connection it is of interest in this number of the women's edition of the BUFFALO MEDICAL JOURNAL.

In June, 1892, three rooms were secured as temporary quarters at 2002 Niagara street. These rooms were provided with three iron beds and one cot bed for a nurse, the most simple household and hospital appliances, combined with surgical cleanliness.

Case I. Maternity. Sent for care by Dr. Irving M. Snow. A married woman, Canadian. In her two previous confinements she had entered the lying-in department of the Toronto hospital, and although the change was great she left with her baby, well pleased. This case is of especial interest as our first.

Case II. An operation sent by Dr. M. A. Crockett, to whom, as operator and consultant, much of the success which has come to this little hospital is due. Case II. made a good recovery.

The next six months were of slow progress. Thirty-six were treated, nearly all gynecological, all successful, and no more

RIVERSIDE HOSPITAL—OPERATING ROOM.

maternity cases came until January, 1893, although many cases applied for free treatment.

December, 1892. As four patients were to be cared for and space permitted but three hospital beds, it was deemed advisable to enlarge the boundaries. A house on the banks of the Niagara river was secured and eight beds provided. Many hospital appliances were added, and a distinctive name, Riverside Hospital, chosen.

The staff was then appointed and consisted of Drs. Randall and Green as house physicians; Dr. M. A. Crockett, gynecologist; Dr. J. W. Putnam, neurologist, and Dr. I. M. Snow, in charge of diseases of children.

As the project was now under way the doctors in charge took this opportunity to call personally upon the physicians in the vicinity in order to explain the work and to ask for their support and coöperation. In each case the projectors of this hospital scheme were received with unfailing courtesy. In some cases the barely perceptible flicker causing a twinkle of the professional eye was just enough to remind one of the early days and the pioneer work done by Dr. Emily Blackwell when she, with much more at stake, started the New York Infirmary for Women and Children. The success of an undertaking in this end of the century days of competition depends very largely upon the ability to fill some want, and the want in this particular venture was hospital care at reasonable rates, where patients might be by themselves and also in charge of the physician sending in the case, while the hospital would provide trained service, as well as attention from a woman physician.

Like all work which meets with healthy success Riverside has grown slowly, not especially as woman's work, but through the hearty coöperation of doctors without regard to sex. Nor is it in any way an aggressive attempt to show that woman as well as man can do hospital work, but it does claim to stand upon its merits and upon the same grounds as do other institutions doing surgical and medical work.

Soon after the removal to Niagara street, Dr. Green withdrew her interest from Riverside and removed to Pike, N. Y., Dr. Randall continuing the hospital work.

An addition to the staff was made by securing Dr. John C. Thompson and Dr. Julius H. Potter in general medicine. Up to this time Riverside had received only women patients, but the

RIVERSIDE HOSPITAL.—PRIVATE ROOM.

demand came for the care of men, and the facilities being enlarged, a resident male student secured, this change was made.

At this time a training school for nurses was organised, a course selected occupying two years, the practical experience at Riverside to be supplemented by attendance at the General Hospital clinics; the Clara Weeks-Shaw text-book chosen, a graduate nurse from the Buffalo General secured as superintendent, and the school with two pupil nurses began lessons in May, 1893. The first graduation of one nurse was in May, 1895.

The present class contains four pupils, and the following course has been given during the year: Surgical cleanliness, Dr. M. A. Crockett; medicine and medical nursing, Dr. Julius H. Potter; obstetrics, Dr. Lillian C. Randall; urinalysis, Dr. John C. Thompson; care of nervous patients, Dr. James W. Putnam; diet and digestion, Dr. John C. Thompson; anatomy, Dr. Lillian C. Randall.

Besides the regular course, lessons supplementary have been given by Dr. Helene Kuhlman. The success of the class in nursing bids fair to continue a feature of the Riverside work in that direction.

In 1894 the hospital was removed to larger quarters near the same place, but after eighteen months it was deemed advisable, as the trolley ambulance system is yet a thing of the future, to move to a more central location. Temporary but hygienic and comfortable quarters were secured at the present home, 327 Breckenridge street, which will be known as Riverside Hospital until a permanent home is decided upon. The hospital can now accommodate fifteen; has a light, large operating room, shown in the illustration, private rooms, one of which is also shown, and also a sitting-room with the double room or ward.

The present staff consists of: Physician in charge, Lillian Craig Randall, M. D. Attending physicians, Montgomery A. Crockett, M. D., gynecologist; James W. Putnam, M. D., neurologist; John Parmenter, M. D., surgeon; Julius H. Potter, M. D., John C. Thompson, M. D., general medicine. Consultants, Charles G. Stockton, M. D., Electa B. Whipple, M. D., Irving M. Snow, M. D., Grover W. Wende, M. D., Bernard Bartow, M. D. House physician, John J. Cullinane, M. D.

In one way Riverside is an exception to most institutions: it has been self-supporting from the first.

The number of operative cases have been many, and it is wor-

RIVERSIDE HOSPITAL—SITTING-ROOM WITH THE DOUBLE ROOM OR WARD.

thy of note that out of 160 cases but one, a case brought to the hospital when in extremis from appendicitis, was lost.

Nervous patients who come for treatment are under the care of Dr. James W. Putnam, and baths, electricity and massage are employed for these special cases.

The belief that the sick public is making use of the advantages offered by hospital care more and more each year offers a future hopeful to hospital work generally.

502 ELMWOOD AVENUE.

HYPERTROPHY OF THE LINGUAL TONSIL.

BY MARY E. DICKINSON, M. D., Dansville, N. Y.

AT TIMES there have come under the observation of every medical practitioner patients with a history of marked tendency to "sore throat" upon slight exposure, a sense of fatigue in the throat after talking or singing a short time, hoarseness, a feeling that crumbs or other small particles are caught somewhere in the throat, sudden choking while eating due to food getting in the larynx, and the like. A dry cough sometimes accompanies these symptoms. This condition may have existed for years as a constant annoyance, increasing in severity until the aggravation compels the sufferer to seek relief.

Upon a general inspection there is seen nothing to warrant the trouble complained of. The hard and soft palate, uvula, pillars of fauces and pharynx seem to be in good condition. The tonsils may be somewhat affected, but not necessarily so.

What is the cause of all this trouble?

Take a laryngoscope and see what you find. In its normal condition the base of the tongue and the part just above present an irregular uneven surface, due to the abundant distribution of papillæ and the layers of lymphatic tissue, embedded in which are the numerous mucous glands. This surface also has an abundant blood supply.

From the nature of the structure it is easy to see how it readily becomes the seat of hypertrophic changes. An ordinary amount of hypertrophy in this region is common and gives rise to no special discomfort. It is when the formation of this lymphatic tissue has filled up in some measure the glosso-epiglottic fossa, sometimes to encroachment upon the epiglottis itself, that the symptoms described are noticed. The blood-vessels

often become varicosed and can be easily seen as red threads or lines through this hypertrophied tissue.

As is natural to expect, this condition is quite prevalent among speakers, teachers, clergymen and singers. It is found more among women than among men.

General treatment is of little use. The only help is in the reduction of this redundant growth. Some good may be obtained by painting the part with strong astringents, nitrate of silver or tincture of iodine, but this relief lasts only as long as the applications are continued.

The radical methods are removal of the tissue by use of the bistoury, curved scissors, cold snare or galvano-cautery.

Owing to the abundant blood supply often found in this condition the greatest care must be exercised in handling the cutting instruments.

The snare is always safe and desirable when the follicles are prominent and easily engaged in the loop, the hemorrhage following being of comparatively little account.

In my experience the use of the galvano-cautery has been most satisfactory. A very small portion of the affected area is treated at one sitting. This is painted with an 8 per cent. solution of cocaine until there is no sense of feeling in the part. In some instances, when the patient is unpleasantly affected by any application of cocaine, I use a fifty per cent. solution of carbolic acid, touching only the exact portion I wish to cover with the cautery.

The wire is bent to fit the curve of the tongue so that the cautery point may lie flat and close upon the surface treated. The cautery tip, moreover, is introduced cold, the interrupter in the handle giving this advantage, as well as that of withdrawing the tip with the current cut off.

These precautions obviate the risk of injury to the adjacent parts, especially the epiglottis, which danger is counted one of the strong objections to the use of the galvano-cautery in these cases. The number of applications of the point at one sitting depends upon the condition of the part, and is usually two, never more than three, covering a narrow area about the width of the point.

The objections stated to the use of this instrument are that the constitutional disturbances are apt to be severe, as nausea, diarrhea, fever, headache, loss of appetite, intense pain in the throat, etc. Perhaps such consequences would follow were a large portion or the whole of the affected tissue treated at one time, but in an

experience including over one hundred cases I have not found these objectionable results. The nearest approach was when at the expressed desire of the patient I cauterised about three times the proper amount at one sitting, and only limited time would induce me to repeat such a treatment.

It is important to take plenty of time, at least six weeks, preferably three months, allowing from six to ten days' interval between the sittings.

There will be some discomfort for two days, especially when the cauterising is made on the sides of the tongue. The patient then may complain of pain in the ear on that side, the irritation extending along the stylo-glossus muscle. Hot wet applications to that part of the neck and face will afford the needed relief and may be continued as long as the pain lasts. If necessary give at bedtime the first night: phenacetine, gr. vj.; sulfonal, gr. xv. Often the patient need not change his usual diet or routine of life in any way.

The results from the obliteration of this hypertrophied tissue are very gratifying. Talking or singing are resumed normally with no sense of "tired throat," hoarseness or "sore throat," as before; and there is no more coughing or choking at table. One patient who indulged in a sore throat with every adverse wind was called away after but part of the work was done. She returned with the experience of having had but one-half of a sore throat, the demarcation being clear enough, as she expressed it, to define with a pencil.

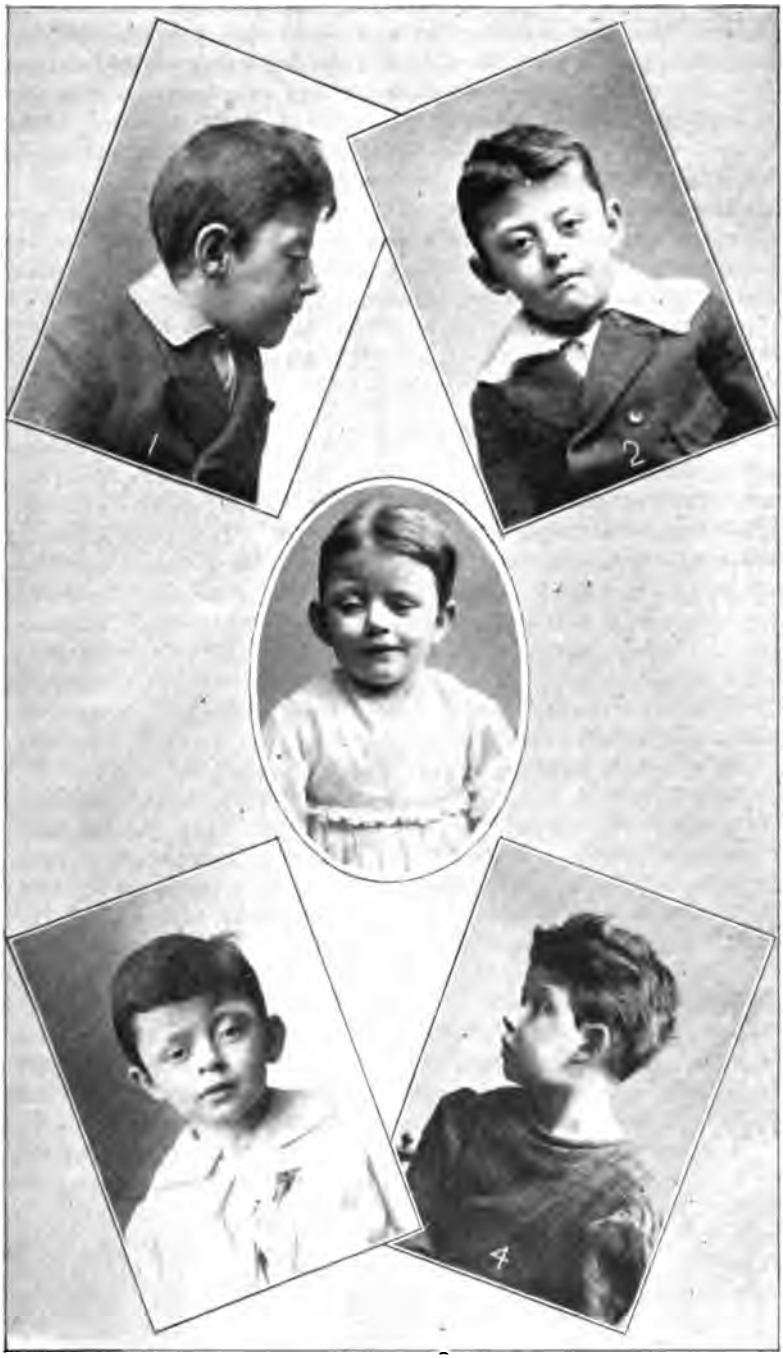
Clinical Report.

THREE CASES OF DEFORMED FETAL SKULL.

REPORTED BY MAUD J. FRYE, M. D., AND MARY M. HUNTLEY, M. D.

IN December, 1895, the writers attended in confinement a woman, the mother of five children, three of whom had been born with deformed heads. She had been attended each time by the same midwife, to whom we are indebted for an account of the labors and the presentations as we give them. No history of positions was obtained.

The patient, Mrs. X., was a French Canadian, 35 years old. She gave a history of good health. When nine years old she began working



DEFORMED FETAL SKULL—FRYE AND HUNTLEY.

out. From that time she was accustomed to do heavy work, washing clothes when it was necessary for her to stand upon a box to reach the tub. This kind of work she still did. She first menstruated at sixteen. She gave no history of specific disease. Two sisters older than herself had each given birth to three children with badly deformed heads. From her mother we obtained a history of rickets in childhood, manifested in delayed and difficult dentition and late walking.

The husband of the patient was a German, aged 34. He gave a history of syphilis contracted a year before his marriage. He was under treatment before his marriage, but had not been since. Tertiary manifestations of syphilis were present.

The history of the labors is as follows: At the age of 23 Mrs. X., then unmarried, gave birth to a child still-born. The labor was long and difficult and delivery was instrumental. Breech presentation. The head was not deformed.

When 25 years of age the patient married Mr. X. The first fetus miscarried at three months. The next child was a boy, now nine years old. She was in labor from Tuesday, when the membranes ruptured, till Friday. The child weighed ten pounds. Presentation vertex. The head was very much elongated and there was a deep indentation extending across the forehead. The baby was not strong and could not hold his head up till he was seven or eight months old. The photographs 1 and 2 show the head as it now appears. The indentation is much plainer on the original. Eighteen months later a girl weighing three pounds was born. Labor lasted thirty-six hours. Presentation vertex. The child's head was very small and there was no deformity, except a slight elongation, not now very apparent.

The next child was born after a severe labor, lasting two days. Weight of child, nine and one-half pounds, head large and deformed. Presentation vertex. There is now a deep indentation in the anterior portion of left parietal bone, continuing into the external part of frontal bone. The face is also much distorted. (Photographs 3 and 4.) This child is mentally weak, and although six years of age can talk but little. Two years ago he was operated on for genu varum. He is also flat-footed. His fingers are clubbed, and his mother says he has had a disease of the finger nails, which from her description was doubtless onychia. There is great asymmetry of the skull in this case, the right side of the occipital and the right parietal bone projecting more than the left. The ends of the long bones show rachitic changes.

A miscarriage at five months followed this birth. The next living child, now three years old, was born after a labor lasting seventy-two hours. Weight six pounds. Head very large. Presentation vertex. A deep depression is now seen on the right parietal and frontal bones. The right side of the face seems pushed to the opposite side. (Photograph No. 5.) The child now has syphilitic dactylitis and onychia.

The succeeding labor was not difficult. The child was a boy weighing seven pounds, the head being small and not deformed.

The sixth and last labor, at which time we saw the mother, was not prolonged and was of no special interest. Presentation vertex. The head was small, with a slight grooving of the forehead, which has since partially disappeared. Diameters of head normal.

Examination of the patient before the birth of the child showed a woman of medium height and weight. Slight rotary-lateral curvature of the spine with tilting of the pelvis. Pelvic measurements: Between ant. sup. spinous processes of the ilia, 30 cm.; between crests of ilia, 28.5 cm.; external conjugate, 17 cm.; internal conjugate, 9 cm.

The history of the case and the pelvic measurements exclude all forms of pelvic deformity except the flattened rachitic pelvis. The pelvic contraction in this case is not great, the birth of a child with a head of normal size being possible with little or no deformity of the skull. The deformity in these cases seems due not so much to the contracted pelvis as to the unusually large heads, due, may we not infer, to congenital rickets? marked evidence of which disease exists in the case of one child, and to which the syphilitic taint from the father would predispose the children. From the deformity of the pelvis present with the account of the long labors one concludes that the delay occurred at the pelvic brim, the grooving of the skull being caused by the promonitory of the sacrum.

224 ALLEN STREET.

Translation.

BACTERIOLOGICAL STUDY OF 117 CASES OF SCARLATINA ANGINA.

BY M. G. H. LEMOINE.

(Translated from *Journal de Clinique et de Therapeutique Infantiles.*)

BY EVANGELINE CARROLL, M. D., Buffalo, N. Y.

THE pharyngeal accidents in scarlatina take first rank among the symptomatic manifestations of the malady by their constancy and often also by their gravity. Depending on the scarlatinal infection they seem besides to prepare a propitious soil for the development of those secondary agents, whose importance one cannot forget, in face of the facts of observation which show us in these agents the origin of the numerous complications of scarlatina.

Because of the clinical resemblance of these accidents to diph-

theritic angina, a large number of observers have undertaken bacteriological researches on the subject, including these scarlatinal anginas in the works on diphtheria. These authors have revealed, however, the presence of a streptococcus, alone or combined, in the false membranes of these scarlatinal diphtherias. (Crooke, Baumgarten, Raskin, Prudden.)

Bourges and Wurtz first, in a work on scarlatinal angina, established a difference between the microbic nature of the early anginas and the late anginas of scarlatina. In eleven cases these observers found in two late anginas the bacillus of Loeffler and in nine early anginas the streptococcus, most often associated with the staphylococcus, five times. They concluded also that the early angina was due most often to the streptococcus, while the late angina was of a diphtheritic nature. M. Sevestre admitted however the possibility of the coëxistence from the outset of two infections, scarlatinal and diphtheritic.

The epidemic of scarlet fever that I observed at the beginning of the year has been for me an occasion of new researches on the subject. If these confirm in great part the observations of MM. Bourges and Wurtz, the larger number of observations and a particular technique here permitted me to acquire some new ideas, which I shall briefly expose.

These scarlatinal anginas, studied from a bacteriological point of view, number 117, plus an abscess of the tonsil supervening in a case of scarlatina on the eighteenth day of the disease.

Of the 117 anginas, 79 were pseudo-membranous and 38 showed no exudate. All belong to the period of the onset of the disease, as I have only observed a single case of late angina, which comes in elsewhere in the category of diphtheritic anginas, due to Loeffler's bacillus. Bacteriological researches have shown the presence of the streptococcus alone in 102 cases, the streptococcus associated with the bacillus of Loeffler in 5 cases, the streptococcus associated with the staphylococcus in 8 cases and the streptococcus associated with the colon bacillus in 1 case.

The results of microbiological analysis, as one may see, agree with those already obtained by MM. Bourges and Wurtz and show how constant is the presence of the streptococcus, since it is found in all the scarlatinal anginas. But, on the other hand, rare as it may be, the Loeffler bacillus may however play a part in these anginas at the outset. In fact, five times we have found this bacillus in the throat of scarlatinal patients. It is possible then, to

have at the same time, as M. Sevestre has admitted, a scarlatinal and a diphtheritic infection. It is well to note that the streptococcus was obtained in a pure state in the great majority of these anginas, in 117 cases. In 102 cases it existed alone to the exclusion of other microörganisms, while in nine cases only was it associated with staphylococcus and the colon bacillus.

The explanation of the difference in our results from those previously obtained lies in the new technique which we used according to the advice of Prof. Vaillard. The technique consists essentially in the careful preparation of the material for culture, taken with care from the tonsil after the cauterisation of the surface of the organ. The implantations have always been made on agar and on serum.

If from bacteriological analysis we pass to the examination of clinical facts, we are bound to note the very particular gravity of certain cases in which the association of the strange microörganisms seem to play an important rôle. There are, above all, the bacillus of Loeffler and the colon bacillus. The other different organisms found associated with the streptococcus, either in the interior of the tonsil or in the exudate, we have not deemed it necessary to discuss, as they present such a different clinical aspect from those in which the streptococcus has been found in an isolated state. We ought also to add that the anginas, due to the streptococcus, have been very variable in their symptomatic manifestations; some (five cases of pseudo-membranous angina) were of extreme gravity, while others have shown themselves relatively benign or of a moderate severity, attested by the well-known variability of the virulence of the streptococcus.

Four scarlatina anginas were particularly serious from the accidents by which they were accompanied during their course and during a protracted convalescence. Two were due to an association with the Loeffler bacillus and two to that with the colon bacillus. All four showed an identical clinical aspect, and the gravity of certain true diphtherias being known, in which cases the colon bacillus existed at the same time with the streptococcus, it is of great interest to note that the association gave rise to symptoms as serious as in the first two. In these, in fact, one sees unrolled the whole symptomatic picture that the old observers knew and described under the name of diphtheria—false membranes, thick, firm, adherent, leaving a bleeding surface after removal; these membranes covering over the tonsils and uvula and presenting a

grayish-white appearance. There existed at the same time sub- and retro-maxillary adenitis, painful and producing by their size the deformity of the neck, typical of patients attacked by grave diphtheria. The face pale, the fever quite high and the state of exhaustion and depression gave the impression of a profound infection of the organism. These four patients recovered, however; but one of them, who has had true diphtheritic angina, has taken five months to regain health, presenting gastric troubles and a persistent albuminuria, which disappeared only three weeks ago.

Thus, then, the association of the colon bacillus produced in two scarlatinal cases absolutely the same symptoms as the bacillus of Loeffler.

From the experiments of others, the virulence of this organism has been found to be very intense. Whereas, the streptococcus culture injected into the skin of the ear of a rabbit had only given a redness with edema and droop of the ear, accidents which were followed by recovery; the same streptococcus injected under the same conditions, but associated with the colon bacillus of this same angina, gave instead a rapidly fatal infection (forty-eight hours).

Is it right, however, to generalise the results of these two observations? I think not, but none the less remains the thought that the association of the streptococcus with the colon bacillus must be regarded as more dangerous than the association with the staphylococcus, the case in the last category not having given rise to any important clinical observation.

Society Proceedings.

BUFFALO ACADEMY OF MEDICINE.

GYNECOLOGICAL AND OBSTETRICAL SECTION.

REPORTED BY LILLIAN CRAIG RANDALL, M. D., Secretary.

THE regular monthly meeting of the obstetrical and gynecological section of the Academy of Medicine was held at the Academy parlors, Tuesday, April 28, 1896.

In absence of the president, Dr. Frederick, Dr. J. W. Grosvenor was called to the chair. Thirty-five members were present during the evening.

The minutes of the previous meeting were read and approved.

THE TEACHING OF OBSTETRICS.

Dr. M. A. CROCKETT read a paper with the above title. In this paper the lecture and recitation methods of teaching medicine are compared, the subject of obstetrics being taken for illustration.

The properly conducted recitation is that in which both interest and thoughtfulness are aroused by making the student play an active part. The plan of giving out certain pages in a book and asking questions merely to test the retentive power is condemned as unworthy the name of teaching. Yet such a method has been introduced into medical schools. The scientific recitation consists of four stages: clearness, association, generalisation and application. The first step is a brief review of the subject-matter which forms the elements of the recitation. In the second stage the class puts the facts into various relations. In the writer's class during the past year the woman in labor was taken as the starting point; the physiology of labor was learned, and from the facts, placenta previa, rupture of the uterus, accidental hemorrhage and other forms of dystocia were discussed by the class without the use of the text-book. In the same manner the third stage is carried out, and the class thinks out principles from the facts which are given. The fourth stage deals with the application of these principles. Association and generalisation must be done by the students themselves. Telling is not teaching; and the student can become thoughtful only by being made to think. The writer does not maintain that the students can escape the memorising of certain facts, but as it is now they are not taught how to economise effort. The lecture system deals primarily with subject-matter and treats the mind as something to be filled up. In the recitation the student does his mental work every day in the class-room, but under the lecture system he waits until the end of the year and then crams. The writer pointed out how poor teaching is almost universally the result of poor method and not lack of knowledge on the part of the instructor; yet recitations are given in charge of the youngest and most inexperienced men. Lecturing is extremely easy and demands but little ability compared with that demanded of an instructor. To plan a recitation, ask skilful questions, direct the thought of the class and awake discussion and mental activity constitute some of the requirements of a good instructor. The lecture was proper in medieval times, when a man could tell his hearers what they could find in no book, and is retained at the present day because men like to pose before students and hear themselves talk. If we

must have lectures for the benefit of the lecturers, the writer begs for a greater number of scientifically conducted recitations for the benefit of the students.

In conclusion the writer outlined the course in obstetrics proper for a four years' curriculum. He advises the developmental plan of recitation as outlined above, combined with clinical and operative exercise.

The principles of teaching rest upon the manner in which the mind acquires the best kind of knowledge. It will be a happy day for students when the medical faculties begin to regard those principles rather than individual aggrandisement.

Dr. P. W. VAN PEYMA, in opening the discussion, agreed in a general way with Dr. Crockett's most scholarly paper, a subject logically and truthfully presented. He himself would rather be a teacher than a lecturer. Times have passed when these things had to be given in dictation in didactic lectures. Too much material is crowded into limited time. More time should be given obstetrics. In Leopold's clinic, in Dresden, the class was divided into groups. After fifteen minutes' study of case, students were asked for their diagnosis. A certain amount of knowledge must be assimilated under careful clinical instruction.

Dr. EUGENE A. SMITH agreed with the essayist especially in regard to the fact that lecturers and teachers so-called loaded up themselves with certain facts to discharge upon student, but he did think that a certain amount of didactic teaching was necessary. He could not see how anatomy could be presented without the students doing a certain amount of work. In obstetrics the real instructor could spend an hour in developing a certain definite obstetrical truth, but unless the student has a knowledge of anatomy gleaned from personal study, he cannot use these truths.

Dr. FREDERICK said his teaching experience had been clinical and believed that theoretical obstetrical teaching should be eliminated and teaching of obstetrics should be clinical, not didactic. Teaching must be modified by each man's personality and experience. His own teaching was from his own experience and could not be found in any book.

Dr. J. W. GROSVENOR: The American Academy of Medicine has occupied itself with this question and has induced many teachers to take up the recitation method.

Dr. J. H. PRYOR said he enjoyed the paper for its thoughtfulness

and literary merit. Teaching has been rank in our medical colleges for the reason that the medical men who are at their head conduct them, both hospitals and colleges, as business concerns, and these medical men like to hear themselves talk. Often professors will give their own treatment, which is of no value. Often in the lecture so much is crowded into an hour that the student cannot grasp single facts.

Clear-headed young men who are examined for the Erie County Hospital show how little they have absorbed and how they would learn had they a chance. Something is radically wrong with the teaching. He hoped the day would come when the didactic lecture will be done away with. This should be done in the interest of the student, not the professor.

Dr. CROCKETT, in closing the discussion, said he was much obliged to the speakers for this hearty discussion. As Dr. Pryor has said, it is not the trend of thought of the professor, it is the trend of thought of the student.

He does not entirely condemn all didactic lectures or instruction. Anatomy, a hard study to teach, should be taught from the patient and in the dissecting-room. Ideal recitation is an end toward which teachers must aim.

SEPTICEMIA IN THE NEW-BORN.

Dr. SNOW read a paper with this title. This paper was discussed by Drs. Thornbury, Smith, Pryor, Kuhlman, Grosvenor, Tobie, Jones and Bennett.

The section adjourned at 11 o'clock P. M.

Progress in Medical Science.

SURGERY.

CONDUCTED BY JANE W. CARROLL, M. D., Buffalo, N. Y.

EARLY MANAGEMENT OF CONGENITAL CLUBFOOT.

LEWIS A. SAYRE (*Medical Record*, April 11, 1896,) enters a strong protest against the prevalent practice of "leaving the child until old enough to stand it." He considers that the treatment should be commenced before the child is forty-eight hours old, and twenty-four is better still.

The method for procedure is for the operator to take the foot

in his two hands and gradually, but very gently, press it around toward the normal position. As this is done you will observe the toes and front part of the foot will become blanched as white as snow and apparently perfectly bloodless. If retained in this position too long, of course sloughing would necessarily follow this obstruction to the circulation. Therefore, after holding the foot in this improved position for a few seconds only, you relax your hold upon the foot, which will immediately recede to its former deformed position, and as it does so you will observe the gradual return of the pink color and the natural circulation to the foot and toes.

If both feet are deformed, as is generally the case, take the other and treat it in the same manner.

Repeat the manœuver a number of times and instruct the nurse how to do the same, and see that it is done every few hours day and night. If these manœuvers are not sufficient, the feet may be treated with the usual dressing of plaster-of-Paris. Dr. Sayre concludes by emphasising (1) the necessity of commencing the treatment at birth; (2) that there is no instrument to be compared with the human hand in rectifying the deformity; (3) no means of retaining the parts in position equal to plaster-of-Paris properly applied.

SURGICAL TREATMENT OF MALIGNANT DISEASE OF THE BREAST.

SANDERSON, of the Women's Hospital, Brighton, (*Lancet*, December 21, 1895,) claims that the whole affected mamma should be freely and thoroughly excised.

As a matter of fact the efferent lymphatic vessels run from the axillary glands through the apex of the axilla to the posterior triangle and, after forming connections with the glands therein, finally enter the right thoracic duct on the right and the left on the left side. Moreover, superficial lymphatics from the skin covering the mamma track up over the clavicle to these same glands in the posterior triangle. It is laid down, says the author, that in primary cancer of the breast the axilla should be cleared whether the glands are visibly affected or not. Why? Because the fact that they are not affected macroscopically is no proof that they are not affected microscopically; and yet, in the face of these anatomical facts, it is not the usual custom or practice to go further.

It is wrong to presume that the axilla is free because it shows

no sign to the naked eye or the finger; it is equally wrong to assume that the posterior triangle has escaped.

Still more is it inconceivable how the triangle can be left if the axillary glands are found affected at the time of the operation.

It may be objected that it is not feasible or is difficult to clear the posterior triangle. It may be done a week or ten days after the primary operation.

A flap formed by a long incision down the sterno-mastoid muscle, meeting an incision along the clavicle, is detached as far back as the anterior border of the trapezius; this exposes the triangle and the contents can be removed with a little care and patience. It is important to remember that lymphatic glands may be affected by carcinoma, directly or indirectly. In carcinoma of the breast the lymphatic glands most frequently affected are those of the axilla, especially the pectoral set lying under the border of the pectoralis minor. Later in the case, glands higher up, situated in the posterior triangle, become also involved.

It is extremely rare, says the writer, for the glands above the clavicle to be affected directly. In any case to reduce the chance of a recurrence to a minimum, the glands of the axilla should be cleared, even if no enlarged glands are felt.

If none are found, the triangle has probably escaped and it is undesirable to subject the patient to increased risk by extending the operation. But if the axilla is markedly involved, there is great probability that the triangle is also, and there is no reasonable chance of cure unless it is also cleaned out.

The superficial glands, lying in the cervical fascia, can be readily taken away, but it is no easy matter to remove the deeper glands which lie around the subclavian vessels and under cover of the clavicle, and these deeper glands are the ones most likely to be affected. Yet he says it is undoubtedly advisable to attempt their removal in many cases where they are now left untouched.—*New York Medical Journal.*

THE MICROSCOPE IN SURGERY.

SENN, in his recent work on tumors, (*Medical Review,*) states the microscope is not so serviceable in diagnosticating tumors as many suppose, and cites as an instance the case of the late Emperor Frederick of Germany. Small pieces of tumor or scrapings of tissue should not be sent to the pathologist simply to see what the microscope will reveal or what the pathologist knows. The object is to

obtain a correct diagnosis, and, to this end, as large a piece of tumor as possible should be sent for examination. It should be accompanied with a history of the case and all other points, such as site, character of growth, and the like. In this way the microscope usually decides when the appearance to the naked eye throws doubt on the character of the tumor.

A NEW METHOD IN THIGH AMPUTATIONS.

DAWBARN, (*Med. Record*), of the polyclinic, presented to the Academy of Medicine, December, 1895, a new method in thigh amputations, although the same had been taught by him for the past ten years, namely: hamstringing the patient just prior to any thigh amputation. "The technique is as follows: The thigh being elevated and 'milked' as usual and the leg held extended on the thigh, thereby causing the hamstring tendons to stand out tensely, the surgeon divides these on both sides with two bold strokes of the knife," bleeding being arrested by the thumb of an assistant.

The Esmarch bandage is now applied above the point at which it is decided to amputate. The reason for hamstringing is obvious. None of the hamstring muscles, save part of one, the biceps, has any attachment to the thigh bone, but all arise from the pelvis and are inserted below the knee. These are the sartorius, gracilis, semi-tendinosus and semi-membranosus. Also the biceps, except as aforesaid. Consequently, when the muscles are cut across in thigh amputations nothing prevents their retraction for a long distance. All the other muscles of the thigh, as the vastus externus, vastus internus, crureus and the adductors, are attached to the thigh bone, and for a considerable distance. Consequently, when cut through in thigh amputation they cannot retract far. Every surgeon knows practically that the thigh muscles do retract to very unequal distances in the stump. For this reason the "suture en etage" was devised, sewing together the muscles in the interior of the stump tier after tier to make a comparatively solid muscular end instead of one full of holes or dead spaces.

In hamstringing the patient, therefore, those muscles at once shorten up, and when a little later we proceed to amputate the thigh we shall find that our stump end will be quite smooth, for all the muscles will retract about equally.

The same principle may be applied in other amputations, as at the tendon Achilles in leg amputations, permitting the gastroc-

nemius to shorten, and the biceps humero-tendon before amputation through the upper arm.

PICRIC ACID FOR BURNS.

FRENCH surgeons (*Medical Times and Hospital Gazette*) have recently been using a solution of picric acid for the first treatment of burns. The pain can be almost immediately alleviated or removed by painting the affected surface with strong solution of picric acid.

The remedy has proved harmless, and the yellow stain can be easily washed out with boric acid.

The general verdict has been that this remedy has greatly lessened suffering and therefore probably saved life, and even severe cases thus treated have recovered more speedily and completely than would have been the case under any other form of treatment. It would be well, therefore, for medical officers of factories or workshops where accidents from burning or scalding are common occurrences to try the experiment and direct that solutions of the acid should be kept on hand and explain the method of application to the workers.

OBSTETRICS, GYNECOLOGY AND PELVIC SURGERY.

CONDUCTED BY ELECTA B. WHIPPLE, A. M., M. D.

VAGINAL FIXATION OF THE UTERUS.

WERTHEIM, of Vienna, (*Centralblatt für Gynäkologie*, May 4, 1895, quoted in *British Gynecological Journal*,) reports results of thirty-seven vaginal fixations of the uterus in the clinic of Professor Schauta. In seven cases operated upon after the directions of Mackenrodt, return of the diseased condition took place. Of nine cases operated upon by Dührssen's (without passing the sound into the uterus) six were completely cured and in three a relapse occurred. Ten cases operated upon by the open method of Dührssen (with the opening of the plica vesica uterina) were cured. Five cases were operated upon by the recent modification of Mackenrodt; four of these were completely cured and in one accidental prolapse of the bowels occurred. Of the six remaining cases, also operated upon by Dührssen's open method—of recent duration—it was impossible to judge of final results. Wertheim concludes that the peritoneum should always be opened in operating and only with this stipulation is the method of Dührssen fully secured.

Mackenrodt's method consists in seizing the cervix with volsella and drawing it firmly backward. A long incision is made in the anterior wall up to the cervix. The bladder is pushed upward and the anterior uterine wall, by successive sutures in the vaginal incision, is caught as high up as possible and at the same time fixed to the incision of the vaginal wall. By Dührssen's method the fundus of the uterus is drawn into the incision, after which it is easy to draw down and open the peritoneum, and by his open method the versico uterine fold of the peritoneum is opened and then the fundus of the uterus can be fixed in the vaginal incision without any force.

SUGGESTIONS FROM PRACTICAL OBSERVATION IN OBSTETRICS.

STAPLES (*Annals of Gynecology and Pediatrics*, December, 1895; *American Gynecological and Obstetrical Journal*) says that of 1,000 recorded cases 33 per cent. were primaparæ. The largest number of births was in the months of August and October, the smallest in June. The youngest mother was 14 years 3 months; child weighed five and one-half pounds; full term. Vertex presentations, 90 per cent.; face, 4 per cent.; podalic, 5 per cent. In cases of dystocia, he cautions against too hasty interference before full dilatation of the cervix and the neglect of anodynes and rest, and adopts Goodell's rule, that in uniformly contracted pelves the use of forceps is better than version. In narrowing of the conjugata vera, version should be resorted to after a trial with forceps, version being preferable to lashing of the forceps' handles. Injuries during labor will occur even with the utmost care. Those who claim never to have seen a laceration may be suspected of being very careless observers or unfortunate in their early moral education. Lacerations of both cervix and perineum should be repaired at once under an anesthetic and with aseptic precautions. He urges the importance of a careful study of each case before delivery as to pelvic diameters, the general condition of patient, especially nephritic disturbances, and urges thorough antiseptic precautions both during delivery and the puerperal state.

BLEEDING FROM VARICOSE VEINS OF THE VAGINA AND VULVA AS A COMPLICATION OF LABOR.

THIELE (*Deutsche Medicinische Wochenschrift; American Journal of Medical Sciences*) reports the case of a multipara who was

seized with hemorrhage from the vagina. On examination the source of the bleeding was found to be varicose veins in that region. The hemorrhage, which became severe, was checked with applications of ice and iodoform-gauze tampon. Repeated transfusion of saline solutions was also made. Labor began and the patient was delivered spontaneously of a dead child. Profuse hemorrhage from the vagina and urethra occurred. Patient made a slow but uninterrupted recovery.

USE OF THE PELVIMETER.

DR. AUSTIN FLINT advocates use of pelvimeter for every primipara, (*New York Medical Record; American Journal of Surgery and Gynecology,*) and says that in pelves with a true conjugate diameter of less than three and one-half inches operative interference usually is imperative. Just under three and one-half inches either forceps or version may be employed. Pelves in which the true conjugate is much less than three and one-half inches call for more severe operations, notably the Cesarean section.

THE TREATMENT OF DYSMENORRHEA.

DR. J. C. CHAPMAN (*Alabama Medical and Surgical Age*) has found apiol, viburnum prunifolium and dioviburnia useful agents in the treatment of dysmenorrhea.

FEMALE PELVIS IN PRIMITIVE RACES.

STRATY (*Nederlandsch Tifdschrift voor Verlos kunde en Gynäkologie; Med. Age*) investigated a series of cases in Java to test the accuracy of certain theories in respect to the relative characters of the pelvis in European and in barbarian or semi-civilised women. Faayer, of Leyden, declared twenty years ago th at the Javanese pelvis was unusually round at the inlet. Stratz reminds obstetricians that this theory was based on the examination of a few macerated pelves. He therefore measured a large number of pelves of Javanese women living up-country. Two races were included in his series, the more primitive being darker, more slender and smaller. The measurements showed little or no difference more than could be explained by the small general proportions of one of the races. The same may be said of the difference between the average Javanese and European pelvis. As it happens, however, the theory of

Faayer seems substantially correct, the transverse measurement of the Javanese pelvis being on an average relatively small. The obstetric teacher should also bear in mind that Stratz found plenty of contracted pelves among these primitive women, who escaping the evils of civilisation do not enjoy its benefits.

TO RELIEVE BLADDER SYMPTOMS.

DR. BALDY (*Journal of Practical Medicine*) has found that bladder symptoms complicate a supposed pelvic trouble in women and that painful and frequent micturition, irritability of the bladder, bearing-down pains and bladder distress are relieved in a considerable number of patients by simple dilatation of the urethra. Even in case of true cystitis, urethral dilatation, accompanied by alkaline diuretics and bladder irrigation, is invaluable.

PEDIATRICS.

REPORTED BY MAUD J. FRYE, M. D.,
Clinical Instructor in diseases of children, Medical Department, University of Buffalo.

YEAST NUCLEIN IN THE TREATMENT OF HIP-JOINT DISEASE.

HITCHCOCK, of Detroit, (*American Lancet*, abstracted in *N. Y. Med. Jour.*,) reports a case of hip-joint disease in which great improvement and apparent cure followed the use of yeast nuclein. The remedy was used hypodermically, and the site chosen for injection was the region immediately around the affected joint. The first few injections were made daily, afterwards on alternate days. In the beginning twelve minims only were used; later the amount was increased to fifty. The reaction was moderate—at times some pain and a burning sensation about the site of injection and a moderate rise of temperature. To be of avail the nuclein must be used early. Dr. Hitchcock believes the value of nuclein to lie in its germicidal powers. The preparation used by him was the one-per-cent. solution manufactured by Parke, Davis & Co.

RENAL COLIC IN INFANCY.

GIBBONS (*British Medical Journal*, January 18, 1896,) describes the occurrence of renal colic in infancy. In none of the patients was a distinct calculus found, but there was an abundance of free uric acid and small masses of mortar-like material, consisting of uric acid, were passed. The attacks occurred in children of gouty

parents, and presented all the signs and symptoms of acute renal colic. Dr. Guthrie, discussing the paper, stated that he had seen such cases among the poor, generally in subjects of a rheumatic diathesis.

TREATMENT OF PNEUMONIA IN CHILDREN.

Archives of Pediatrics devotes considerable space in the April number to this subject. Drs. Geo. M. Swift, L. Emmet Holt and W. P. Northrup, of New York; Dr. J. P. Crozer Griffith, of Philadelphia; Dr. E. M. Buckingham, of Boston, and Dr. Samuel S. Adams, of Washington, contribute articles giving briefly the treatment followed in the various children's hospitals which they attend. The treatment on the whole is strikingly uniform. The following may be taken as representing the average:

1. In all cases attention is given to hygiene—warm, airy, well-ventilated rooms, careful attention to regulation of nutrition and digestion.

2. For the relief of pain, counter-irritation, opium if needed.

3. For cough, inhalations; in some hospitals the croup tent; opium if needed. So-called expectorants, except chloride of ammonia, are almost entirely discarded.

4. Fever *per se* is not considered as requiring treatment. If the nervous symptoms demand, antipyretic measures are used, preferably hydrotherapy, the means employed being sponge baths, warm or cold, tub baths, the cold pack and ice bags. Antipyretic drugs are employed by some.

5. Stimulants are used as indication arises. Those to which all give prominence are alcohol in the form of whisky or brandy, strychnine, which children bear well, and nitroglycerin, in some cases extremely valuable. Stimulants may be given hypodermatically.

6. So far as specific remedies are concerned, but one is suggested, the chloride of calcium, which is given by Dr. George M. Swift in lobar pneumonia in from two to five-grain doses every two or three hours.

TYPHOID FEVER IN YOUNG CHILDREN.

NORTHRUP (*Archives of Pediatrics*, January, 1896,) contributes an article tending to corroborate the general belief that children under two are markedly insusceptible to typhoid. The epidemic at Stamford, Conn., in the spring of 1895, was due to a contaminated

milk supply. In all, 406 cases occurred. Only four of these were in children under 2 years of age. Three cases occurred between two and three. The course of the disease in these children was similar to that in adults. The characteristic eruption is a valuable aid to diagnosis. The author remarks that he desires to encourage a healthy scepticism as to typhoid in an infant in the absence of an epidemic, if the case lacks the classic symptoms and signs which would lead to a diagnosis in an adult. Autopsy findings, as shown by Dr. Northrup, are misleading; swelling of Peyer's patches and the solitary follicles are common in simple intestinal disease.

PUBLIC HEALTH AND SCHOOL SANITATION.

By IDA C. BENDER, M. D., Buffalo, assisted by JANE NORTH FREAR, M. D., Buffalo.

HEALTHFULNESS OF BUFFALO.

UNDER this heading the *Journal of the Amer. Med. Assn.*, May 9th, makes some interesting comments regarding the sources of error in computing the death-rate of cities on the basis of an estimated population, citing the following instances: "In New York, for example, up to April 27, 1895, the population was 'estimated' at 2,013,723, and the death-rate for the week ending on that date—the total number of deaths reported being 885—was figured at 22.93 per annum in the weekly report of the New York Health Department. In the report of the following week this rate shot up to 25.7, while the deaths reported were 890, or only *five* more than for the previous week. The explanation is found in a foot-note on the first page of the May 4th report: 'Police census, April 15, 1895, 1,849,866'—a shrinkage of more than 7 per cent. in the 'estimated' population." Similar inaccuracies are shown to have occurred in Chicago for the same reason. The *Journal* then goes on to note with favor the method in use in the Buffalo Department of Health, which consists not only of the publication of a rate based upon a population, estimated with more or less care, but also of a statement of the actual number of deaths reported year by year. The latter figures show a substantial reduction in the past five years, namely: 1891, deaths 6,001, rate 23.48; 1892, 5,697, 19.98; 1893, 5,711, 19.03; 1894, 5,280, 16.76; 1895, 4,684, 13.95.

A HEALTH DEPARTMENT OF THE RENAISSANCE.

IN *Annales de la Societé Mid.-Chir. de Liége*, February, 1896, we

read an account of a Bureau of Health in the city of Lyons, France, as early as 300 years ago, which was much more than a prophecy of the modern but hardly less advanced and successful department of to-day. Among its regulations were those providing for the declaration of contagious diseases and the disinfection of residence, clothing and bedding. It is a noteworthy fact that the disinfecting materials employed included some of our best modern antiseptics—sublimate, arsenic, camphor and various essences.

THE COST OF AN EPIDEMIC.

IN THE *Popular Science Monthly* for March the following interesting statistics, compiled by Dr. Munro, are given. They were first published in the *British Medical Journal*. In the course of an epidemic of enteric fever, in 1893, there occurred 859 cases and 74 of these died. The loss in wages was $16,455; the cost of treatment, $21,475 and of funeral expenses $1,850.

Adopting Farr's estimate of the average value of each wage-earner as $795, we have for 74 deaths the sum of $58,830. By this estimate the pecuniary loss to the community arising in connection with the epidemic was $98,610.

Dr. Munro says that a consideration of these figures may well suggest the question whether any investment is calculated to yield a better pecuniary return than money spent in liberally maintaining a well-equipped public health department, which has for one of its chief objects the prevention of epidemics.

MEDICAL INSPECTION IN BOSTON SCHOOLS.

DURGIN (*Boston Medical and Surgical Journal*, April 9, 1896,) gives an account of the work recently taken up by the Board of Health of Boston, to secure medical inspection of schools and supervision of the isolation and release of persons suffering from diphtheria and scarlet fever. The board of health divided the city into fifty districts, with an average of four school-houses and 1,400 pupils to each district. It appointed one physician for each district, whose duty it is to visit the schools in his charge daily, soon after the beginning of the morning session. Teachers are instructed to note the appearance of symptoms of illness among the pupils and to report the same to the visiting physician. The latter examines the reported children, making a record of his diag-

nosis and action in books furnished by the health board and kept in the custody of the master of each school. Sick children are sent home to be cared for by parents and the family physician. If it is found that a child has a contagious disease, such child is ordered home and the case reported to the health board. A wooden tongue depressor is used for examination of the throat. Each depressor is used once and then burned. The medical inspector never undertakes to give professional treatment in any case; he merely points out the need of treatment and this must be received from the family physician or in hospitals or dispensaries. The total number of children examined between November 1, 1894, and October 31, 1895, was 14,666, of whom 9,188 were found to be sick. The number found sick enough to be sent home was 1,745. Of these, 437 were suffering from contagious or infectious diseases, as follows: diphtheria, 70; scarlet fever, 26; measles, 110; whooping-cough, 28; mumps, 43; pediculosis, 66; scabies, 42; congenital syphilis, 8; chicken-pox, 34. Many other diseases were discovered needing treatment, such as swollen glands, anemia, chorea, Potts's disease, and the like.

Incidental to this school inspection the same men also serve as agents of the board of health in the control of contagious diseases treated at home. Each medical inspector is held responsible for the proper isolation of the patient at home, for causing the patient's removal to the hospital when necessary and for the patient's release from isolation. The board of health is thus provided with trustworthy information, upon which it can act for the protection of, the schools and the public against the spread of contagious diseases.

QUEEN MARGARET COLLEGE, Glasgow, the women's department of the university, has enrolled 67 medical students. Of the graduates of medicine and surgery of this college 2 are in practice in Glasgow, 5 are engaged in foreign mission work in India, 1 is in Egypt and 2 are ready to proceed to China.—*Brit. Med. Jour.*—*Med. Review.*

A SCHOOL of medicine for women, at St. Petersburg, has already an annual grant of $50,000 from the government and $12,000 from the city, while from private sources the sum of $360,000 has been raised.—*Med. Record.*

A WOMAN occupies the chair of histology in the medical faculty of Bologna.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITORIAL STAFF, WOMEN'S EDITION:

MAUD JOSEPHINE FRYE, M. D., *Managing Editor.*

ELECTA B. WHIPPLE, M. D. IDA C. BENDER, M. D.

HELENE KUHLMAN, M. D.

VOL. XXXV. JUNE, 1896. No. 11.

COLLEGE COMMENCEMENTS AND ALUMNI ASSOCIATION MEETINGS.

UNIVERSITY OF BUFFALO.

THE fiftieth commencement of the Medical Department of the University of Buffalo was celebrated in a becoming manner. Alumni hall greeted the assembled alumni on the morning of May 5th with a brave show of flags and blue and white bunting, the university colors. During the forenoon the usual business was transacted, the following officers being elected: president, P. W. Van Peyma, Buffalo; first vice-president, D. A. Currie, Englewood, N. J.; second vice-president, Herman G. Matzinger, Buffalo; third vice-president, J. A. McPherson, Tonawanda, N. Y.; fourth vice-president, J. W. Putnam, Buffalo; fifth vice-president, Charles Meine, Germania, Pa.; permanent secretary, E. L. Frost, Buffalo; recording secretary, N. V. Chappell, Buffalo; treasurer, H. U. Williams, Buffalo. One new trustee was elected, C. A. Wall, Buffalo. The executive committee remains as last year.

The committee on revision of the constitution, appointed last year, reported and after some discussion and amendment its report was adopted.

The afternoon session opened at 2 P. M. Dr. Baker, the outgoing president, being absent, Dr. Van Peyma occupied the chair.

The following scientific papers were read: Colpoperineorrhaphy, Henry J. Garrigues, M. D., New York; discussion by Drs. Eugene A. Smith and Charles H. Richmond. State of the gastric mucosa in secretory disorders of the stomach, Max Einhorn, M. D., New York; discussion by Drs. Charles G. Stockton, Allen Jones and A.

L. Benedict. Reconstructive surgery of the tubes and ovaries, Robert T. Morris, M. D., New York; discussed by Drs. Henry J. Garrigues, M. D. Mann and C. C. Frederick. Some notes on the coronary arteries, George Dock, M. D., Ann Arbor, Mich.; discussed by Drs. H. R. Hopkins and DeLancey Rochester.

During the afternoon, Dr. M. D. Mann announced to the alumni the generous gift to the university by Dr. D. W. Harrington of $2,000 to establish the D. W. Harrington lectureship in the Medical Department. These lectures are to be given by men chosen by the medical faculty on such subjects as shall interest not only the advanced students in the university but the medical profession in general.

Dr. Charles G. Stockton laid before the alumni a plan concerning a suitable memorial to Dr. Thomas F. Rochester, which was explained in detail by Dr. H. U. Williams. It is proposed to raise a sum of money, the interest on which shall be used to maintain a fellowship in pathology, to be known as the Rochester memorial fellowship. This fellowship is to be awarded by competitive examination, to which the younger graduates of the university will be admitted.

GRADUATING EXERCISES.

The graduating exercises were held at Music hall at 8 P. M. After the opening prayer by Rev. William J. McKittrick, the candidates for the medical degree were presented to the chancellor by Dr. John Parmenter, secretary of the faculty. Their names are as follows: Byron A. Brown, M. D., Fairport, N. Y.; Marie L. Benoit, Montreal; Charles O. Boswell, A. B., Rochester; Normal L. Burnham, Buffalo; Clayton M. Brown, Weathersfield Springs; Albert H. Berry, B. S., Buffalo; George F. Craft, Gorham; William B. Cochrane, Penfield; Charles H. Cullinane, Watkins; Herman B. Cole, Hamburg; John Dugan, Geneva; James C. Dorr, Buffalo; Paul Dittman, Buffalo; Daniel A. Eiseline, Canandaigua; Charles V. Fairbanks, Harrisville; James W. Fox, Palmyra; R. Bruce Gamble, A. B., Meadville; Herman F. Graf, Buffalo; Addison P. Halsted, Potter; Charles D. Hauser, Girard; Mary M. Huntley, Buffalo; Horace L. Hulett, Little Genesee; Frank A Helwig, Clarence; James E. Holden, Buffalo; Elmer A. Jones, Warren, Pa.; John E. Jones, Buffalo; Regina Flood Keyes, Buffalo; William C. Keyes, Buffalo; W. L. Kistler, Buffalo; James E. King, Buffalo; Oscar H. Kraft, Buffalo; George A. Lane, Rochester; Charles E. Low, Pulaski; Guy L. McCutcheon, Ph. D.,

Buffalo; William B. May, Buffalo; Myron H. Metz, Williamsville; Arthur A. Moore, Buffalo; Charles G. Miller, Ph. D., Buffalo; John M. Mesmer, Buffalo; Charles E. Norris, Nunda; Frederick C. Peterson, Watertown; John K. Rupert, Buffalo; William B. Reed, Ph. G., Buffalo; Frederick E. Squires, East Avon; Charles A. Shepard, Lewiston; James W. Shaul, Jasper; Harland L. Stanbro, Keuka College; Joseph Spangenthal, M. D., Buffalo; Francis I. Shepard, Buffalo; Ulysses B. Stein, Buffalo; James A. Taggart, Jr., Buffalo; Alan P. Vaughn, Springville; Arthur M. Whaley, Buffalo; Charles M. Whitcher, Ph. B., Mayville.

Following the administration of the Hippocratic oath by Dr. Mann, dean of the faculty, the chancellor, Hon. James O. Putnam, conferred the degrees.

Dr. Mann then announced the honor list of those who had an average of 90 and upward in medicine as follows: 1. Miss Mary M. Huntley; 2. James E. King; 3. Elmer A. Jones; 4. Charles D. Hauser; 5. Fred E. Squires; 6. R. Bruce Gamble; 7. Daniel A. Eiseline; 8. Charles R. Cullinane; 9. Charles G. Miller; 10. Mrs. Regina Flood Keyes, Addison T. Halstead.

Honorable mention was accorded the thesis on The therapeutic effect of certain preparations of arsenic, by Guy L. McCutcheon. William C. Keyes received a check for $50 for the best thesis on Pathology, second prize going to Myron M. Metz.

The following students reached a general average, which makes them eligible to appointment as resident physicians at the Buffalo General Hospital: James E. King, Elmer A. Jones. Charles D. Hauser, Frederick E. Squires, R. Bruce Gamble, Daniel A. Eiseline, Charles R. Cullinane, Charles G. Miller, Addison T. Halstead, W. L. Kistler, William C. Keyes, Norman L. Burnam, Byron A. Brown, Frank A. Helwig, Clayton M. Brown, William B. Cochrane, Horace L. Hulett and Arthur M. Whaley. From the list the following were appointed: Dr. Charles G. Miller, Buffalo; Dr. Charles D. Hauser, Girard, O.; Dr. Norman L. Burnham, Buffalo; Dr. Byron A. Brown, Fairport, N. Y. If six appointments are made, Drs. King and Squires will also be made resident physicians at the hospital.

Dr. John R. Gray, secretary of the Department of Pharmacy, presented the class in pharmacy to Chancellor Putnam, who conferred the degree upon twenty-four students.

Dr. Willis G. Gregory, dean of the Pharmacy Department, announced that the William H. Peabody prize of $50 in the senior

class had been won by John G. Brooks, of Ithaca. The honor roll of seniors is as follows: John G. Brooks, Charles E. Abbott, George F. Briggs, Ernest T. Sumner and Burt S. Stevens. Clifton C. Briggs, of Clifton Springs, was awarded the $25 prize in the junior class for laboratory and lecture work.

Dr. A. P. Southwick, secretary of the Dental Department, presented the candidates for the degree D. D. S., Dean Barrett administering the oath. The class numbered thirty-six.

The honor roll entitling its recipients to honorary places on the faculty was as follows: Henry D. Warren, Albert T. Lythe, Richard B. Redway, C. Arthur Bean and Henry F. Squire.

Chancellor Putnam then, in a brief but interesting manner, reviewed the history of the University from its organisation with Millard Fillmore as its first chancellor to the present. He said:

I well remember the interest and the hope that centered in the enterprise when a few of the citizens of Buffalo met to organise the university under its new charter. Its first chancellor was Millard Fillmore, who passed all the gradations of state and national honor. His last years were spent in his Buffalo home, representing every private and citizen virtue. His successor was O. H. Marshall, an able lawyer, a man of letters, who won distinction as an annalist of the early history of our West and Northwest. He was succeeded by the accomplished Sprague, who is gratefully remembered for his interest in and his labors on behalf of the university. The official relations of these three chancellors cover nearly the entire history of the university.

Following the organisation of the university its medical college was founded by a few of the leading physicians of the city. Three I may name were specially prominent in organising the college: Dr. James P. White, able, aggressive and courageous; Dr. Austin Flint, an unassuming, courtly gentleman, who, during his life in Buffalo and New York, attained great celebrity, largely contributing to the literature of his profession; and Dr. Frank H. Hamilton, a distinguished surgeon, ever gracious in manner, not carrying his points by storm, but winning his way by merit which could not be hid.

There were other strong members of the faculty, and the prestige given the college by its founders has never been lost. Their successors have not only maintained its early reputation, but have advanced the science of their specialties. Four other departments have been created during the last ten years: In January, 1886, the Department of Pharmacy, with 97 students now enrolled; in 1891, the Dental Department, already requiring a new building; in 1891, the addition of the Buffalo Law School; in 1895, the Department of Pedagogy. * * *

An academic department awaits the generous endowment which the wealth of Buffalo will undoubtedly in due time bestow. A great indus

trial and commercial city has need of the inspirations which flow from these ideals that are in touch with the higher nature of man and of society.

Congratulations are in order, and I heartily extend mine to the official and educational departments of the university on the splendid record it has made in the first half century of its existence.

At the close Chancellor Putnam introduced the speaker of the evening, Mr. Joseph O'Connor, editor of the *Enquirer*, who delivered a most scholarly address which, did space permit, we should be glad to report in full. In closing he said: "There are some men who seem to be born physicians, and happy is he whom nature as well as the university faculty has given a commission to heal, in whom the impulse to serve is strong and sympathy for suffering intense. He has an instinct for the detection of disease like that of the setter for game. He has a soft touch and a strong will. He breathes confidence and challenges trust. He is cheerful but never blustering, and comes into a room like a wind from the pines in summer."

The dinner at the Genesee concluded the day. Dr. P. W. Van Peyma acted as toastmaster and the following toasts were responded to: The University of Buffalo, Dr. Roswell Park; Medical women, Dr. Ida C. Bender; The newspaper a sphere for the scientific man, Edward H. Butler; The patient, L. G. Sellstedt; The class of 1896, Dr. Charles G. Miller; The Buffalo General Hospital, Dr. Renwick R. Ross.

It is a noteworthy occurrence that at the fiftieth commencement of the Medical Department a woman should lead her class. Could those of half a century ago know this, what amazement would be theirs! And this is only the beginning. "What they have done, but the earnest of the things that they shall do."

NIAGARA UNIVERSITY.

THE eleventh annual meeting of the Alumni Association of the Medical Department of Niagara University was held at the college building, Tuesday, May 12, 1896. Dr. C. C. Frederick opened the meeting with an address of welcome, which was followed by the annual address of the president, delivered by Joseph J. Kane, M. D. The business session was then held and the officers for the ensuing year were elected as follows: President, Dr. J. S. Peterson, New York City; first vice-president, Dr. Frank W. Maloney, Rochester, N. Y.; second vice-president, Dr. J. W. Nash,

Buffalo; secretary, Dr. Henry Osthues, Buffalo; permanent secretary, Dr. John J. Twohey, Buffalo; treasurer, Dr. Frederick M. Boyle, Buffalo; executive committee, Dr. J. J. Twohey, Dr. F. A. Hayes and Dr. J. G. Ernest. The afternoon session was called to order at 3 P. M. by the president, Dr. Joseph J. Kane. Resolutions were read relative to the death of Dr. A. Victor Conley and Dr. Walter J. Riehl.

The first paper was read by Sidney A. Dunham, M. D., of Buffalo, who is making a special study of alcoholism; his subject was Involuntary intoxication from a medico-legal standpoint; discussed by Drs. Harry A. Wood, L. J. McAdam and A. L. Benedict. The other papers were: Treatment of retrodeviations of the uterus, C. E. Congdon, M. D., Buffalo; discussed by Dr. E. A. Smith; Some heart lesions and their treatment, by D. L. Redmond, M. D., Buffalo; discussed by Dr. A. L. Benedict; Treatment of puerperal convulsions, with report of cases, L. G. Hanley, M. D., Buffalo; and Puerperal eclampsia, with report of cases, by J. S. Peterson, M.D., New York. The last two papers were discussed by Drs. Ingraham, Lothrop, Buswell and Frederick.

The meeting was well attended and great interest evinced in the able papers presented. All of those reading papers were graduates of Niagara University.

GRADUATING EXERCISES.

The graduating exercises were held at the Star Theatre, at 8 P. M. On the stage were the members of the faculty, wearing their black gowns and scarlet hoods, and in the front rows sat twelve black-gowned graduates of the class of 1895-6, upon whom the degree of M. D. was about to be conferred. Their names are as follows: Joseph Patrick Francis Burke, Buffalo; Cornelius John Carr, Greenwood; Edward Charles Corston, Buffalo; Frank Amos Crosby, Hickory Corners; William Edward Goodsell, Medina; Morgan Daniel Hughes, Elmira; John Joseph Mahoney, Jamestown; George Elias Nour, Syria; James Albert Oliver, Stevensville, Ont.; Leib Hirshow Shenier, Buffalo; Gideon Davis Smith, North Chemung; James Stanislaus Walton, Scranton, Pa.

In opening the exercises Dr. Thomas Lothrop referred to the death of their beloved chancellor, the late Rt. Rev. Stephen Vincent Ryan, bishop of Buffalo. He announced that in the absence of the president of the University, the Rev. Father McHale, the trustees authorised Dr. John Cronyn, Ph. D., LL.D., president of the Medical Faculty, to confer the degrees.

The candidates, one at a time, were presented to the acting chancellor by Dr. H. C. Buswell, professor of the theory and practice of medicine, using the following Latin formula:

Insignissime Cancellarie: Presento tibi huncce scholarem in Facultate Medicinæ ut admittatur in gradum Doctoris in Medicina testorque eum quoad omnia quæ statuta requirunt aptum et idoneum esse.

The candidate then knelt before the seated chancellor, who took the hand of the graduate and pronounced the following words:

Ad profectum Republicæ ego, auctoritate meaet totios Universitatis, admitto te ad gradum Doctoris in Medicina licentiamque tibi do omnia ea faciendi quæ ad illum gradum pertinent.

While this formula was reciting, Dr. Carlton C. Frederick, acting as beadle, "hooded" the graduate, who then rose and signed the Hippocratic Oath in the presence of Dr. A. A. Hubbell, secretary of the faculty.

The valedictory address was delivered by Herman Mynter, M. D., professor of operative and clinical surgery, and we would be glad to give it entire, did space allow. It was full of sensible advice; impressing upon the graduates the absolute necessity of keeping abreast of the times by close application and intelligent study; calling attention to the fact that medicine is a stern mistress and those who wish to succeed in that profession must bear in mind that advancement in the science of surgery and medicine is being made daily and success is achieved only by constant and well-directed efforts. It was listened to with rapt attention by the graduates and the large audience. After a graphic comparison of this profession with others, Dr. Mynter closed his address and gave way to Bishop Mallalieu.

In Bishop Mallalieu's eloquent address to the graduates he held before them the high ideals which should ever be the physician's.

The twelfth annual banquet was held at the Genesee. Covers were laid for about seventy. Dr. Joseph J. Kane acted as toastmaster. The toasts were as follows: Niagara University, Rev. L. A. Grace; The alumni, Dr. F. C. Gram; The beloved physician, Hon. R. B. Mahany; Our enemies, Mr. D. V. Murphy; The expert witness, Dr. W. C. Krauss; Stafford's motto, Mr. Joseph O'Connor; The gentlemen, Dr. Maud J. Frye; The ladies, Dr. H. C. Buswell; The newly-fledged, Dr. J. J. Mahoney.

This ended one of the most interesting commencement days in the history of Niagara University.

WOMAN AND THE BICYCLE.

SO MUCH has been said and written about the advantages and disadvantages of bicycling, especially for women, that it would be well-nigh impossible to add anything new on the subject. There are now probably very few physicians who would not recommend bicycling as a safe and healthful form of exercise to a woman without grave organic disease. It should, in our estimation, be forbidden where grave disease of the pelvic organs and acute disease of the bladder exists, but in the minor pelvic ailments it might safely be tried; for the increased amount of oxygen introduced into the system, the swifter circulation and the mental exhilaration would be powerful tonic factors and be especially serviceable in cases associated with hypochondriasis. It is hardly safe to allow persons with organic heart disease to ride, although Tiburties, in a recent number of the *Deutsche Medicinische Wochenschrift*, of April 2d, claims that in his own case bicycling regulates the heart's action, and he rides with impunity, although suffering from atheroma and a moderate amount of emphysema.

That bicycling produces a sense of wellbeing, both physical and mental, that it increases the appetite and promotes sleep, cannot be disputed by anyone who has ever ridden. A woman especially, however, should remember that all the benefits derived from bicycling will be nullified if it is carried to excess. The rides should be judiciously graduated, commencing with a few miles and very gradually increased in length, but never carried to the point of physical exhaustion.

Hills of any size should not be attempted until they can be ascended with comparative ease. Riding should be forbidden during the menstrual periods. The clothing should be light and comfortable, the underwear preferably of wool or silk. The corset should be discarded, as it prevents the full expansion of the lung and impedes the circulation, and as a good substitute can easily be found in the Ferris or equipoise waist.

There should be no constriction about the limbs, as that would impede the circulation and lead to the formation of varicose veins. The objections which have heretofore been raised against faulty saddles have been removed to a great extent by the Messinger and Christy saddles, which appear to meet all the indications.

The saddle should be so adjusted that the extremity is not completely extended as it reaches the lowest point of the pedal, for complete extension favors a tilting forward of the pelvis. The

handle-bar should be arranged in such a way that the forearm is slightly flexed.

If the foregoing points are observed and conscientiously carried out by the rider, bicycling is one of the most wholesome and delightful forms of exercise a woman can take. It is especially to be recommended in neurasthenic patients, in those suffering from derangement of the digestive system, particularly when complicated with constipation and in cases where the system is below par, the result of a sedentary mode of life.

THE ERIE COUNTY HOSPITAL.

AT THE time the JOURNAL goes to press, the smoke of battle has not yet cleared from the field of the county hospital contest sufficiently to disclose the features of the real victors. Enough has been learned, however, to call forth an expression of regret as the turn affairs seem to have taken.

The attitude of the JOURNAL during the whole discussion hat been plainly on the side of reform, as can be learned by referring to previous numbers. The editors of the present issue modestly venture the suggestion that the presence of one or two good, sensible, competent women to act as peacemakers might have saved—indeed may yet be the means of saving—a good deal of energy that is now expending itself without credit to anyone or any cause.

In this connection no harm will be done by the frank expression that some of the talking which has been done to conciliate "the galleries" has been unworthy of an enlightened and progressive profession. We refer to the soul-stirring descriptions of the enforced attendance at clinics on the part of patients as an invasion of their sacred liberties. Surely medical men ought to use every reasonable opportunity to inculcate the principle that to turn one's misfortune so as to prove of advantage to mankind is to act with praiseworthy self-sacrifice and altruism.

AN OBJECT LESSON FOR ANTIVACCINISTS.

APROPOS of the centennial of the great discovery made by Jenner in 1796, the case of the city of Gloucester, England, offers even at this late day a striking example from which to draw the lesson of the beneficial results to mankind of this discovery. The incident gains additional interest when we recall the fact that

Jenner was a native of the county of which Gloucester is the county-seat. Verily, "a prophet is not without honor save in his own *county*."

Gloucester, according to the *Journal of the American Medical Association*, May 9th, has for years been the center of an active anti-vaccination agitation. The authorities who were charged with the duty of securing vaccination have persistently and successfully refused to meet their obligations in this particular. The result of this neglect of duty is not hard to infer. Small-pox has been in practical possession of the town. During the first three and one-half months of the current year no less than 1,300 cases had been reported. The population of Gloucester is 42,000. In the period named the proportion of inhabitants attacked by the disease was one in every thirty-two or thirty-three. As has been the case in other epidemics of small-pox, the heaviest percentage of mortality has been among the unvaccinated, and where unvaccinated patients have not died they have been the greatest sufferers, in many cases becoming permanently disfigured or blind. Vaccinated infants have escaped, and where adults who had been vaccinated in infancy have been attacked the severity of the disease has been greatly lessened.

The *British Medical Journal*, April 25th, reports that the epidemic has promoted vaccination throughout England; the guardians of the Gloucester Union even, the negligent officials referred to in the preceding paragraph, have been scared into doing their duty by enforcing the law in regard to vaccination. The result of this changed attitude on their part, aided by the vigorous action of the Town Council, has been such that within a few weeks no less than 25,000 vaccinations and re-vaccinations have been performed.

A REMARKABLE WOMAN IN MEDICINE.

DR. GABRIELE BARONIN POSSANNER is the first woman physician to practise medicine in Austria. During a study in Vienna, in the Summer of 1895, we had the pleasure of meeting and becoming acquainted with Dr. Possanner, who is a most charming and accomplished as well as beautiful Austrian woman, of about twenty-seven years of age.

Dr. Possanner's family belongs to the old German nobility and

her very careful education was anything but a professional one, as it is not accepted in society that a woman should have any profession whatever. When she first had the idea of studying medicine her family were very much displeased, but, as she remarked, "when they saw that I put all my luck in it, they did not earnestly object."

She prepared for the matriculant examination privately and passed it after two—instead of eight—years' study; then went to Zurich, where she passed the same examination again; then passed the state's examination and took her degree there. While a student in Zurich the Austrian government offered her a scholarship if she would promise to go to Bavaria after finishing, but this she did not accept, because she would only accept if they accepted her as a real Austrian physician. After completing her studies she went to Vienna and was given a position as *operateur* in Professor De Schauta's *Gynäkologie Klinik* for six months, which position was never before held by a woman.

She then entered a petition to the ministry for instruction for admission to the nostrification of her diploma. After six months she received the answer that they could not take her petition into consideration.

In the Spring of 1895 she was offered the position as physician at the *Officers Tochter Institut*, which she did not accept, as she would have no right to treat any but the children at the institute itself, and really the appointment was in effect only that of a school teacher.

In June, 1895, Dr. Possanner entered a petition to parliament, which was very favorably accepted and given to the government with a warm recommendation. She then entered a petition to the emperor for admission to practise. The emperor sent it with "the great signature," the best recommendation he can give, to the government, and they wanted then to give her a limited admission to practise in women's diseases, without examination. To this she objected, because it would have left the question unsolved for women altogether, and she felt that it did not correspond with the dignity of a doctor to be limited.

Therefore, they had to unroll the principal question of women being admitted to the examination, which is now decided in the best sense possible, as the law passed on March 31, 1896, and Dr. Possanner has before this date passed the required examination for women physicians to practise in Austria.

TOPICS OF THE MONTH.

A RETROSPECT.—Fifty-six women have graduated from the Medical Department of the University of Buffalo in the last twenty years. Dr. Mary B. Moody was the first to receive her diploma, graduating in the Centennial year. Until 1890 but two women had been honor students, though others had ranked high. Since that time thirteen women, out of a total of thirty-six graduating, have taken honors; twice a woman has led her class.

The full list of women graduates, as compiled from the Alumni catalogue, issued by the University, is as follows:

*Kathryn M. Bailey, Buffalo, '89; Gertrude E. Beebe, '91; Ida C. Bender, 671 Ellicott street, Buffalo, '90; Alice McL. Ross Bennett, 191 Delaware avenue, Buffalo, '90; Clara E. Bowen, 158 Benzinger street, Buffalo, '92; Marie L. Benoit, Montreal, '96; Ava M. Carroll, '88; Evangeline Carroll, 285 Ashland avenue, Buffalo, '93; Jane Wall Carroll, 285 Ashland avenue, Buffalo, '91; Martha F. Caul, 936 West avenue, Buffalo, '91; N. Victoria Chappell, 326 West Ferry street, Buffalo, '92; Isabel A. Church, B. S., 210 W. 133d street, New York, '93; Salina P. Colgrove, Ph. G., Salamanca, N. Y., '88; Amanda M. Congdon, Cuba, N. Y., '92; *Annie B. Culver, Des Moines, Ia., '84; Mary I. Denton, 228 Potomac avenue, Buffalo, '91; Mary E. Dickinson, Dansville, N. Y., '90; Louise Downer, Warsaw Sanitarium, Warsaw, N. Y., '86; Ella May Doyle, East Concord, N. Y., '93; Amelia Dresser, 92 Chester street, Buffalo, '93; Alice B. Foster (Bryn Mawr), 57 Vernon street, Wakefield, Mass., '91; Jane North Frear, 28 Orton Place, Buffalo, '94; Maud J. Frye, 224 Allen street, Buffalo, '92; Anna Wadsworth Hatch, Sank Cen., Minn., '89; Jeannette Potter Himmelsbach, 137 West Tupper street, '90; Mary M. Huntley, 369 Hudson street, Buffalo, '96; Elizabeth Johnson, 68 West 38th street, New York, '87; Sophia B. Jones, Six Lakes, Mich., '83; Rachel J. Kemball, 228 West Tupper street, Buffalo, '84; Regina F. Keyes, 298 Bouck avenue, Buffalo, '96; Elizabeth M. King, Akeley Inst., Grand Haven, Mich., '93; Ada C. Latham, 174 Dodge street, Buffalo, '92; Cora Billings Lattin, 212 Humboldt Parkway, Buffalo, '94; Emma C. LeFevre, 558 East Church street, Elmira, N. Y., '92; Elizabeth Fear Leffingwell, Summit, N. J., '88; Emma L. McCray, Lovell's Station, Pa., '91; Jennie L. Messerschmidt, Bath, N. Y., '93; Mary Blair-Moody, Fair Haven Heights, New Haven, Conn., '76; Helen Kennedy Morehouse, 183 Jewett avenue, Buffalo, '85; Nellie Edmunds Murray, 153 Clinton street, Tonawanda, N. Y., '92; Sarah H. Perry, 103 South Fitzhugh street, Rochester, N. Y., '82; Lillian Craig Randall, 502 Elmwood avenue, Buffalo, '91; Mary E. Runner-Sanford, Buffalo, '81; Sarah E. Simonet, Croghan, N. Y., '85; Mary Jane Slaight, 33 Chestnut street,

* Deceased.

Rochester, N. Y., '80; Ellen Roberts Spragge, 426 Connecticut street, Buffalo, '88; Elizabeth M. Squier, Albion, N. Y., '93; Isabella H. Stanley, 415 Central avenue, Dunkirk, N. Y., '83; Anna M. Stuart, Elmira, N. Y., '95; Clara B. Talbot Weidman, Rockport, Me., '90; Marian A. Townley, 14 Aurora street, Ithaca, N. Y., '89; Amelia Earle Trant, 1268 Main street, Buffalo, '94; Bina Potter-Van Denbergh, Dansville, N. Y., '83; Stella Cox Venable, Geneseo, N. Y., '88; *Frances Weidman Wynds, Brooklyn, '91; Mary Berkes Wetmore, 30 Woodlawn avenue, Buffalo, '80.

THE Legislature of 1895-6 has numerous sins of omission and commission to be laid at its door. Of these, the one that has created the most unfavorable comment from members of the medical profession in all quarters of the state is a bill passed late in the session and referring to the management of the state hospitals for the care of the insane. In its original form it was a bill to provide for a codification of the laws relating to lunacy, but an amendment which was quietly added makes it a most dangerous measure, giving to the Governor the power to turn out of office every trustee or manager of every state hospital in New York, excepting those of the Middletown (Homeopathic) Hospital! As there has been no charge of incompetency or of any abuses preferred, there can be but one inference drawn from such an unprecedented proceeding—the places are needed as political prizes! It was hoped that Governor Morton would refuse to sign this astonishing, infamous bill, but—*Que voulez-vous?*

UNDER the title, "An act to regulate the employment of women and children in mercantile establishments, and to provide that the same shall be enforced," the last Legislature passed and the Governor approved a bill of interest not only to the general public but to the medical profession also. The most noteworthy features of this act are the regulation of the number of hours a week that women and children can lawfully be employed, the sanitary arrangements of the places in which they do their work, particularly with reference to light, ventilation, the location of water-closets, and the like, all of which must be approved by the local health authorities, and the regulation of the length of the luncheon hour. But the one provision of peculiar interest is found in Section 2, and refers to a system of registration of a certain class of

* Deceased.

employees, the most thorough ever attempted. We quote from this section: "No child under 14 years of age shall be employed in any mercantile establishment of this state. It shall be the duty of every person employing children *to keep a register*, in which shall be recorded the *name*, *birthplace*, *age* and *place* of residence of every person employed by him under the age of 16 years." The bill also makes it obligatory for each child under 16 who is employed to file with his or her employer a certificate obtained from the local Board of Health, stating the date and place of birth, the *color of eyes* and *hair*, the *weight* and *height*, together with any distinguishing facial marks of the individual named in the certificate, and also setting forth the fact that the health commissioner, or any person designated by him, considers such child physically able to perform the work intended. This law is to take effect September 1, 1896. It is made incumbent upon local health boards to see that the law is faithfully observed, and penalties, consisting of fines or imprisonment, or both, are fixed for omissions or violations of the law. It is obvious that if the foregoing law is to be enforced in Buffalo in a conscientious manner, the work of the health department will be greatly increased and additional health inspectors must be provided. The work to be done under this law is of a kind that women physicians are peculiarly well fitted to do satisfactorily. We hope that our excellent commissioner will not overlook this fact when he sets his department at work in obedience to the law.

In the report of 1895 of the New Hospital for Women, in London, is incorporated the following personal: "It may interest our supporters to learn that Miss Ellaby, M. D., ophthalmic surgeon to the hospital, was requested to go to India last October to operate on the Maharanee of Jamnagar for cataract. The patient was 70 years of age and for five years had perception of light only. Both eyes were operated upon with a month's interval between the two operations; the recovery in both cases was without complication of any kind, and the sight of both eyes was completely restored."

The students of the London School of Medicine for Women, which numbers 150, receive in the wards and out-patient department of the Royal Free Hospital their clinical instruction. The Royal Free was opened in 1828, and for the past eighteen years has afforded women medical students advantages without which they

would not be eligible to go up for examination by the various examining boards. As to their success in examinations, Mr. Thies, the secretary of the Royal Free, said: "Seeing that in one year nine of them went in for the London M. B. and all passed, I think I may say they were successful." On July 22, 1895, the formal opening occurred by the Prince and Princess of Wales of the new front building of the Royal Free, which completed the reconstruction commenced forty-three years since. Kings George IV. and William IV., the Duchess of Kent and the Queen—soon after her ascension to the throne—were patrons, and her Majesty has ever since taken a lively interest in the prosperity of the institution.

THE following comment, signed "Editor," is found appended to a correspondent's letter in the *London Lancet* of November 9, 1895. We call the attention of dress reformers to it: "We have at different times spoken our minds concerning tight lacing and the misshapen corset. But the well-fitting corset is a valuable article of attire. With different modifications it becomes, as all our profession know, a useful surgical instrument; and the ordinary corset provides a grateful support in many conditions."

ACCORDING to the last report of the Commissioner of Education there were, during the year 1892-3, 1,302 women enrolled as students in the various medical schools of the United States. Of these 827 were in the regular and 330 in the homeopathic schools. During the same year there were 98 women studying pharmacy and 63 studying dentistry. The report states that there are in this country seven schools for the medical education of women exclusively. Of the 104,803 physicians and surgeons in the United States, 4,555, according to the census of 1890, were women.

A BILL has passed the Legislature of Virginia authorising the appointment of female physicians for the female wards of the State insane asylums.

NOTWITHSTANDING the protest of numerous medical and scientific societies, the Committee on the District of Columbia has reported a bill to restrict vivisection in the district. The American Medical Association in session at Atlanta, May 5–8, adopted resolutions earnestly protesting against the passage of the bill, truthfully

observing that far more unnecessary pain is constantly being inflicted upon the lower animals for sport and for game than in biologic and pathologic laboratories.

Notes About Women.

Dr. Eliza M. Mosher, of Brooklyn, was last January appointed a professor of hygiene in the University of Michigan and a dean of the literary department. The honor is one of the greatest ever paid to a professional woman. The place to which she was appointed had never before been held by a woman. Dr. Mosher was graduated from Ann Arbor in 1875. She has been superintendent of the Massachusetts Reformatory for Women and professor of physiology in Vassar College. She is a member of various medical societies and has made several valuable contributions to medical literature.

Dr. Sarah R. Adamson-Dolly, of Rochester, was the second woman in the United States to receive a full medical diploma, Dr. Elizabeth Blackwell being the first. Dr. Dolly graduated in 1851 as Dr. Adamson, marrying a little later Dr. Lester Dolly, the professor of anatomy and surgery in the school from which she graduated. Since 1872 Dr. Dolly has been a widow. Her son, Dr. Charles Dolly, is a prominent Philadelphia physician. Despite her advancing age Dr. Dolly still practises in Rochester.—*Abstract from Post-Express.*

Miss A. I. de Steiger, (*American Medical Review,*) a medical woman of London, was recently appointed third medical officer to the Essex County Lunatic Asylum, Brentwood. In order to make the appointment of a woman to this office regular it was necessary to alter the rules. England is coming on, despite the fact that her two leading universities still refuse to confer degrees upon women.

Personal.

Drs. L. S. McMurtry, of Louisville, and Charles A. L. Reed, of Cincinnati, have been appointed honorary presidents of the International Periodic Congress of Gynecology and Obstetrics, which

holds its meeting at Geneva during the first week in September, 1896. Dr. McMurtry will sail from New York on the French line July 18th.

Dr. Wm. Warren Potter, of Buffalo, has been appointed vice-president of the auxiliary committee of the second Pan-American Medical Congress for Buffalo and vicinity. This congress convenes in the City of Mexico in November of this year.

Dr. Irving M. Snow and Mrs. Julia F. Snow, of Franklin street, Buffalo, sailed, May 27, 1896, on the American liner City of New York, for a month's stay in England. They will return early in July.

Dr. J. W. Grosvenor, of Buffalo, was elected vice-president of the American Academy of Medicine during its recent annual meeting at Atlanta.

Dr. and Mrs. Alphonse Dagenais and Miss Blanche Dagenais, of Virginia street, Buffalo, will spend the summer abroad.

Dr. and Mrs. Lucien Howe, of Delaware avenue, Buffalo, have returned from a trip abroad.

Obituary.

Dr. Michael Retel, of Buffalo, died at his residence in this city, May 20, 1896, aged 38 years. He was a native of Buffalo and a son of the late Dr. Caspar Retel. He was a graduate of Buffalo University Medical College, a member of the Medical Society of the County of Erie, and had been engaged in the practice of medicine fifteen years. He is survived by a widow, two brothers and two sisters; one brother, Dr. George Retel, was associated with him in business. Dr. Retel's funeral, held Sunday, May 24th, was largely attended.

Peter V. Carroll, husband of Dr. Jane W. Carroll and father of Dr. Evangeline Carroll, died at his home, in Buffalo, April 20, 1896, of acute uremic poisoning. He was 48 years of age and had

been a sufferer from chronic Bright's disease for a number of years. He was a prominent business man and well beloved on account of his excellent mental and moral qualities. He leaves a wife and ten children.

Dr. George B. Wheeler died at the Willard state hospital, April 7, 1896, as the result of appendicitis. He had been a medical interne in that institution since May 16, 1895, but had recently been appointed on the staff.

Hospital Note.

The second commencement of Riverside hospital took place Wednesday, May 27, 1896, one graduate, Margaret Johnston, receiving her diploma. The program consisted of addresses by Rev. Henry Elliott Mott and Rev. Thomas Calvert, with musical selections. The training class of 1897 consists of five pupils.

Society Meetings.

The Second Pan-American Medical Congress.—The committee on organisation of the Second Pan-American Medical Congress has elected Dr. Manuel Carmona y Valle, president, Dr. Rafael Lavista, vice-president, and Dr. Eduardo Liceaga, secretary, and has announced November 16, 17, 18, 19, 1896, as the date of the meeting to be held in the city of Mexico.

The most cordial invitation is extended to the medical profession of the United States to attend and participate in the meeting.

Titles of papers to be read should be sent at the earliest practicable date to Dr. Eduardo Liceaga, Calle de San Andres num. 4, Ciudad de Mexico D. F. Republica Mexicana.

The date selected will find Mexico most attractive to a Northern visitor.

The occasion should stimulate the medical profession of the United States to a most cordial reciprocation of the generous patronage accorded the Washington meeting of the congress by our Mexican confréres. It should be remembered that the United States is the largest, and in many regards the most important of

the American countries, and that as a consequence more is expected of it than of any other occidental nation. It is, therefore, simply essential that in this congress—the most important of all medical congresses, in its exclusive, yet broad, American significance—the best thought and the best work of the American profession shall be conspicuous in the proceedings.

Those who contemplate attending should send their names and addresses at as early a date as possible to Dr. Charles A. L. Reed, St. Leger Place, Cincinnati, that the committee in Mexico may be advised of the probable attendance.

WILLIAM PEPPER,
ex-officio President.
A. M. OWEN,
A. VANDER VEER,
CHARLES A. L. REED,
ex-officio Secretary.
International Executive Committee for the United States.

THE National Confederation of State Medical Examining and Licensing Boards held its sixth annual meeting at Atlanta, Ga., May 4, 1896. The following officers were elected for the ensuing year: president, William Warren Potter, M. D., Buffalo, N. Y.; vice-presidents, Charles A. L. Reed, M. D., Cincinnati, Ohio, and J. N. McCormick, M. D., Bowling Green, Ky.; secretary and treasurer, A. Walter Suiter, M. D., Herkimer, N. Y.; executive council, Perry H. Millard, M. D., St. Paul, Minn.; Joseph M. Mathews, M. D., Louisville, Ky.; William S. Foster, M. D., Pittsburgh, Pa.; Hugh M. Taylor, M. D., Richmond, Va., and James Mackintosh Hays, M. D., Greensboro, N. C.

The president appointed the following committee on the minimum standard of requirements: Drs. Perry H. Millard, Minn., chairman; N. R. Coleman, Ohio; B. M. Griffith, Illinois; J. M. Hays, North Carolina, and Gardiner T. Schwartz, Rhode Island.

THE American Medical Association held its forty-ninth annual meeting at Atlanta, Ga., May 5, 6, 7 and 8, 1896. The following officers were elected: president, Dr. Nicholas Senn, Illinois; first vice-president, Dr. George M. Sternberg, Washington, D. C.; second vice-president, Dr. Edmond Souchon, Louisiana; third vice-president, Dr. J. B. Thomas, Pennsylvania; fourth vice-president,

Dr. Willis F. Westmoreland, Georgia; treasurer, Dr. Henry P. Newman, Illinois; assistant secretary, Dr. T. B. Schneideman, Pennsylvania; librarian, Dr. George W. Webster, Illinois; chairman of committee of arrangements, Dr. H. A. Hare, Pennsylvania; trustee to fill vacancy, Dr. G. C. Savage, Tennessee; trustees, Dr. E. E. Montgomery, Pennsylvania; Dr. J. M. Mathews, Kentucky, and Dr. C. A. L. Reed, Ohio; judicial council, Dr. George W. Stoner, U. S. Marine Hospital service; Dr. C. W. Foster, Maine; Dr. J. McFadden Gaston, Georgia; Dr. I. M. Quimby, New Jersey; Dr. H. Brown, Kentucky, and Dr. X. C. Scott, Ohio. Address in surgery, Dr. W. W. Keen, Pennsylvania; address in medicine, Dr. Austin Flint, New York; address in state medicine, Dr. J. Cochran, Alabama. The semi-centennial meeting of the Association will be held in Philadelphia, June, 1897.

THE American Orthopedic Association held its tenth annual meeting in Buffalo, May 19, 20, 21, 1896. The meeting came too late for anything more than the briefest notice in the JOURNAL. The opening session was held at Alumni hall, University building, High street, at which time the president, Dr. Royal Whitman, of New York, delivered his address on The scope of orthopedic surgery. Dr. Bernard Bartow, of Buffalo, read a paper before the society on Division of the hamstring tendons by the open method for correcting the malposition and securing rest in tubercular disease of the knee. Officers elected were: president, Dr. Samuel Ketch, New York; 1st vice-president, Dr. Henry M. Sherman, San Francisco; 2d vice-president, Dr. L. A. Weigel, Rochester; treasurer, Dr. E. G. Brackett, Boston; secretary, Dr. John Ridlon, Chicago. Dr. Bernard Bartow and Dr. Roswell Park were the local committee of arrangements.

THE twelfth annual meeting of the New York State Medical Association (Fourth District branch) was held May 12, 1896, at the parlors of the Iroquois hotel, Buffalo, N. Y. The president, Darwin Colvin, M. D., being absent, Dr. Charles G. Stockton presided. The following papers were read: A recent experience with erythema nodosum trachialis, George F. Cott, M. D.; Reports of especially interesting cases in abdominal surgery, C. C. Frederick, M. D.; Acute catarrhal gastritis, Charles G. Stockton, M. D.; Two cases of intrathoracic growths, De Lancey Rochester, M. D.

THE American Public Health Association will hold its annual meeting at Buffalo, September 15-18, 1896. The chairman of the local committee of arrangements, Dr. Ernest Wende, with the energy that characterises all his undertakings, is laying plans for a hearty welcome to the distinguished savants whom this meeting will call together. The gathering bids fair to be most successful and profitable.

THE fiftieth annual session of the Wisconsin State Medical Society will be held in the assembly chamber, Madison, Wis., June 3, 4 and 5, 1896. The preliminary program is attractive both in appearance and contents.

THE Medical Society of the County of Erie will hold its regular semi-annual meeting at the Buffalo Academy of Medicine parlors, Tuesday, June 9, 1896, under the presidency of Dr. J. G. Thompson, of Angola.

THE American Gynecological Society met in New York, May 26, 27 and 28, 1896.

Removals.

DR. L. J. MCADAM, of Buffalo, announces that he has changed his residence to 341 Jersey street, corner of Normal avenue, and that he will retain his present office at 108 Austin street, in which Dr. C. M. Brown will be associated. Hours: 341 Jersey street, until 9. A. M., 1 to 3 P. M.; at 108 Austin street, 10 A. M., 7 to 8 P. M.; Sunday, 4 to 6 P. M.

DR. LORENZO BURROWS, of Albion, N. Y., has moved to 388 Franklin street, Buffalo, where he will continue the practice of ophthalmology and otology.

DR. JOHN E. BACON, of Buffalo, announces the removal of his office and residence from 149 Franklin street to 79 Niagara Square. Hours: 10 to 12 A. M., 2 to 4 P. M., 7 to 8 P. M.

DR. JANE N. FREAR announces a change of location from 145 Seventh street to 28 Orton place, Buffalo. Hours: 8 to 10 A. M., 1 to 3 P. M. and 7 P. M.

DR. FREDERICK PREISS and Dr. WILLIAM PREISS have removed from 115 Franklin street to 160 Franklin street, Buffalo, N. Y.

DR. J. J. FINERTY, of Buffalo, has removed from 220 Franklin street to 266 Franklin street.

DR. J. W. PUTNAM, of Buffalo, has removed from 388 Franklin street to 525 Delaware avenue.

DR. F. H. MILLS, of Buffalo, has removed from 160 Franklin street to — Huron street.

DR. JOHN H. PRYOR has removed from 253 Allen street, Buffalo, to 56 Allen street.

Book Reviews.

PEDIATRICS: THE HYGIENIC AND MEDICAL TREATMENT OF CHILDREN. By THOMAS MORGAN ROTCH, M. D., Professor of the Diseases of Children, Harvard University. Royal 8vo, pp. xii.—1,124. Illustrated. Philadelphia: J. B. Lippincott Company. 1895.

This work is divided into eighteen sections, written in the form of lectures, a style which is hardly an advantage. In the first division the infant at term is discussed, the student being made familiar with its appearance by a beautiful colored plate facing the title-page. Division II. continues with the normal development of the child. The value of the hundred or more pages of these two divisions, which make us acquainted with the normal physiology, anatomy and development of the child, to the young practitioner at least, can hardly be estimated. Comparing these chapters with older works on pediatrics one is impressed with the valuable contribution which Dr. Rotch has made to this branch of medical literature.

The chapter on hygiene of the nursery would make an excellent manual for nursemaids and mothers. This section includes vaccination, illustrated with a fine colored plate. Infant feeding receives the treatment which one would expect from Dr. Rotch;

135 pages are occupied in its consideration. Maternal feeding is considered first. For those beyond the reach of laboratory analyses the author recommends the method of Holt, of New York, for clinical examination of human milk. The necessary instruments are a hydrometer, a pipette and a stoppered 10 c.c. graduated cylinder. But half an ounce of milk is needed. The specific gravity and fat being known, the percentage of proteids may be computed by comparison with the average specific gravity and fat percentage. Sugar is a very constant quantity and the salts are too small in amount to be considered. The careful analyses of milk and the detailed report of cases, under the head of disturbed lactation, are helpful features of this chapter.

Substitute feeding is gone into in much detail, so far as the Walker-Gordon process is concerned, but the physician far beyond the reach of milk laboratories gets but little satisfaction out of the chapter and he may wonder if the cows have not strayed in from an agricultural report.

Division V. considers the premature infant and its management. The blood in infancy and childhood occupies Division VII., one of the most important of the whole work. Much that is new is given here and, as we note throughout the book, the normal conditions are first fully considered. The various blood diseases, primary and secondary, are then taken up and after them follow reports of blood examinations in individual diseases. The author concludes the section with a bibliography.

Diseases of the new-born are fully considered, a bibliography accompanying those rare diseases, acute fatty degeneration and infectious hemoglobinemia. Division IX. deals with diseases of the skin, Division X. deals with syphilis, erysipelas and the exanthemas. Two colored plates are included in this section. Division XI. takes up the diseases of the nervous system and the myopathies. Nearly 200 pages are occupied with their consideration. The classification of the diseases of the nervous system as given by Dr. Rotch is excellent. He divides them into organic, presumably organic and functional. Functional diseases are further divided into presumably central and reflex. Chorea, epilepsy and insanity are considered under the head of presumably organic. Dr. Rotch acknowledges his indebtedness to Dr. Wm. N. Bullard in the preparation of this section.

Division XII. deals with diseases of the mouth, nose and nasopharynx, including diphtheria. A colored plate illustrates the appearance of the mouth and throat in the various ulcerative and exudative diseases. The antitoxin treatment for diphtheria we would have been glad to see dwelt on at greater length than it here is.

Division XIII. considers the diseases of the gastro-enteric tract. The classification of disease here used is that prepared by Dr. Rotch and Dr. Holt for the American Pediatric Society and adopted by that body. The following section covers diseases of

the liver, pancreas, spleen and peritoneum. A relatively small space is devoted to diseases of the genito-urinary organs.

In the lectures devoted to the diseases of the lungs and pleura it is noted that the term capillary bronchitis is eliminated. Diseases of the heart and unclassified diseases, in which section are found rheumatism and rachitis, complete the volume. Throughout the work the illustrations are new and, for the most part, helpful in elucidating the text. In treatment, the author has kept uppermost the idea expressed in the sub-title, "the hygienic and medical treatment of children." This feature commends the book as a guide to the young practitioner, who is ever prone to overdose the baby. The faults of the work are those which any book not encyclopedic in character will possess. It not being possible for one mind to see all the subject in a fair light, some parts seem dwelt upon too lightly. M. J. F.

OUTLINES OF MATERIA MEDICA AND PHARMACOLOGY. A Text-book for Students. By H. M. BRACKEN, M. D., Professor of Materia Medica, Therapeutics and Clinical Medicine, University of Minnesota. Octavo, pp. 383. Price, $2.75. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1895.

The author states in his preface that the volume was designed as an aid to the student in materia medica. As such it is to be recommended. The classification is good and the book gives in a systematic way the principal facts that the student should know about each drug. The newer preparations have received due attention. The statement of the author that inversion of the body in dangerous chloroform narcosis is to be avoided is rather surprising, as it is at variance with the general teaching, for undoubtedly a number of lives have been saved by this method. The book is of little use to the practising physician, as the therapeutical details are too meager, but it is an efficient aid to the student. H. K.

A MANUAL OF THE PRACTICE OF MEDICINE. By GEORGE ROE LOCKWOOD, M. D., Professor of Practice in the Woman's Medical College of the New York Infirmary; Attending Physician to the Colored Hospital and to the City (late Charity) Hospital, etc., etc. Small 8vo, pp. 935. With seventy-five illustrations in the text and twenty-two full-page colored plates. Price, $2.50. Philadelphia: W. B. Saunders, 925 Walnut street. 1895.

As the author says in his preface, he "aims at presenting the essential facts and principles of the practice of medicine in a concise and available form." The book is of convenient size, good type and the excellent classification of Osler has been adopted. There are many plates of typical temperature, charts and some fine diagrams in the chapters devoted to diseases of the heart, lungs and brain and many other illustrations besides. The style is easy and the writer comes to the point quickly by a process of

reasoning so concise and simple that the overworked student and busy practitioner owe him gratitude. He is of a practical turn of mind and gives the reader the benefit of his own large and valuable experience. Diagnosis is fully dwelt upon; only enough pathology, however, is given to enable one to follow the rationality of the treatment. Dosages and prescriptions do not figure so largely as in many of our text-books on practice, but the indications for certain classes of drugs, modes of dieting, and the like, are clearly given, and individual judgment and individual patients may regulate the minutiæ. Brand's treatment of typhoid and the use of antitoxin in diphtheria are explained and the book is up to date in recommending the tested reliable therapeutic agents of recent note. The chapters devoted to diseases of the circulatory system are especially fine, logical and enjoyable, and the work as a whole is a valuable addition to the medical library. E. C.

A HANDBOOK OF OBSTETRIC NURSING, for Nurses, Students and Mothers. By ANNA M. FULLERTON, M. D., Obstetrician, Gynecologist and Surgeon to the Woman's Hospital of Philadelphia; Clinical Professor of Gynecology to the Woman's Medical College of Pennsylvania. Fourth, revised, edition. Illustrated. Philadelphia: P. Blakiston, Son & Co., Publishers. 1895.

As indicated by the author, this book comprises "the course of instruction in obstetric nursing given to the pupils of the training school for nurses connected with the Woman's Hospital of Philadelphia." There are chapters on the pelvic and genital organs; signs, management and accidents of pregnancy; germs and antisepsis; application of antisepsis to confinement nursing; preparations for labor; signs of approaching labor and the process of labor; duties of the nurse during labor; accidents and emergencies of labor; management of the lying-in; care of the newborn infant; characteristics of infancy in health and disease and ailments of early infancy. This little work is thoroughly practical and admirably adapted as a text-book to be used in training schools for nurses, since the principles set forth are in accord with the "requirements of modern practice." It is an interesting volume, most valuable of its kind and deserves to be appreciated by those for whom it was written. E. B. W.

DIET IN SICKNESS AND HEALTH. By MRS. ERNEST HART, formerly Student of the Faculty of Medicine of Paris, and of the London School of Medicine for Women. With an introduction by Sir Henry Thompson, F. R. C. S., M. B., London. Pp. xii.—219. Philadelphia: W. B. Saunders, 925 Walnut street. 1895.

The volume under consideration is a most useful and readable compendium of dietetics within the comprehension of the student, and especially adapted to the needs of the busy practitioner in his efforts to select and prescribe a suitable diet for the seriously afflicted entrusted to his care.

The first seven chapters, embracing forty-two pages, are devoted to a consideration of foods, their classification, properties, chemical constituents and nutrient values, and assimilation. The next thirty-four pages treat of under-feeding and over-feeding, on thinning and fattening, and dishes for the aged. Following this are three short chapters on digestion and on indigestion, in which the ascertained relation to the functions of the various organs concerned in digestion are succinctly stated. The remaining pages are given to a consideration of the diet indicated in the treatment of various diseases and diatheses. Gastric ulcer, diabetes, gout, phthisis, scurvy, typhoid fever and Bright's disease are some of the conditions for which special diets are recorded. This section of the work is peculiarly adapted to the needs of the active physician. The "bill of fare" suitable in a given disease is fully outlined and varied for each day in the week and receipts are given for the preparation of dishes mentioned.

Altogether the volume commends itself to those wanting a ready reference in selecting suitable diet where certain classes of food are aids to treatment. L. C. R.

BOOKS RECEIVED.

Twentieth Century Practice. An International Encyclopedia of Modern Medical Science. By Leading Authorities of Europe and America. Edited by Thomas L. Stedman, M. D., New York City. In twenty volumes. Volume V. Diseases of the Skin. New York: William Wood & Co. 1896.

Weekly Abstract of Sanitary Reports, issued by the Supervising Surgeon-General Marine Hospital Service. Volume X. 1895. Washington: Government Printing Office. 1896.

Transactions of the American Dermatological Association, at its Nineteenth Annual Meeting, held at Montreal, Can., September 17, 18, 19, 1895. New York: Geo. L. Goodman. 1896.

Obstetric Accidents, Emergencies and Operations. By L. Ch. Boisliniere, A. M., M. D., LL.D., late Emeritus Professor of Obstetrics in the St. Louis Medical College; Honorary Fellow of the American Association of Obstetricians and Gynecologists, etc., etc. Duodecimo, pp. 381. Liberally illustrated. Price, $2.00 net. Philadelphia: W. B. Saunders, 925 Walnut street. 1896.

Proceedings of the Philadelphia County Medical Society. Alfred Stengel, M. D., Editor. Volume XVI. Session of 1895. Philadelphia: William J. Dornan, Printer. 1895.

Literary Notes.

THE *National Medical Review*, of Washington, is now "the official journal of the Medical Society of the District of Columbia." All papers and discussions given before that society will be published in the official journal. This society now numbers about 300 active members, and includes a number of the most prominent medical

men in the army and navy. The editor announces that his journal will be enlarged and otherwise greatly improved in order to carry into effect this new arrangement.

WEIR'S *Index to the Medical Press*, Vol. I., No. 1, is at hand. It is a monthly journal devoted to medical bibliography, at present including in its scope only American publications. It is attractively printed, contains a list of the current journals referred to and an index of medical literature not only by title but by author as well. Its moderate price places it within the reach of all. Frank Weir & Co., publishers, New York. $3.00 per annum.

THE NEWER REMEDIES, by Virgil Coblentz, A. M., Phil. D., F. C. S., etc., is a reference manual of the newer remedies, together with their sources, methods of preparation, tests, incompatibles, medicinal properties and doses. It is a valuable little work which any physician may obtain free by writing to McKesson & Robbins, wholesale druggists, 91 Fulton street, New York.

The Woman's Hospital Surgical and Gynecological Clinic will be issued from St. Louis on June 1st, (*American Therapist*,) Dr. George F. Hulbert, president of the St. Louis Woman's Hospital, editor and publisher. Subscribers will be sought primarily among country physicians who combine surgery with general practice, but city doctors may also subscribe.

LEA BROTHERS & Co., publishers, Philadelphia and New York, announce the early issue of A Treatise on Surgery by American authors, edited by Roswell Park, M. D. The work is to be issued in two volumes, royal octavo. Among the contributors are John Parmenter, M. D., of Buffalo, and Chauncey P. Smith, M. D., of Buffalo.

THE New York Pharmacal Association calls attention to the merits of Lactopeptine in one of the prettiest booklets seen for many a day, entitled The Test of Time, which is printed in old English text, illuminated, on imitation cloth, with cloth binding.

THE Drevet Manufacturing Company, of New York, has secured an injunction against Dr. A. P. Beach, of Seville, O., restraining him from using their trade-mark, Glycozone.

P. Blakiston, Son & Co., 1012 Walnut street, Philadelphia, have lately issued a portrait catalogue which is a beautiful guide to their publications on medicine, dentistry, pharmacy, chemistry and allied subjects.

The Rio Chemical Company have recently issued a handsome pamphlet on Urethral Diseases, containing clinical reports of the use of S. H. Kennedy's extract of pinus canadensis.

Miscellany.

The Wilhelm Meyer Memorial.—In recognition of his great services to humanity it is proposed to erect a monument to the late Prof. Wilhelm Meyer, in his native city, Copenhagen, Denmark. To this end committees have been formed in all the principal countries of Europe for the purpose of raising the necessary funds. A large and influential national committee, representative of all the leading sections of this country, has been appointed and power given to each member of it to make such local arrangements as in his judgment shall best secure the success of his work. It is hoped that all who have profited by the results of Dr. Meyer's teachings, not only of the medical profession, especially in the departments of laryngology, otology and pediatrics, but also among the laity, will be willing to aid in the accomplishment of the object for which the committee was formed. F. W. Hinkel, M. D., is the member of the committee for Buffalo, and to him any contributions may be made.

The William F. Jenks Memorial Prize.—The fourth triennial prize of $400, under the deed of trust of Mrs. William F. Jenks, will be awarded to the author of the best essay on The etiology and pathology of diseases of the endometrium, including the septic inflammations of the puerperium. The essay, which must be written in the English language, or if in a foreign language accompanied by an English translation, must be sent to the College of Physicians of Philadelphia before January 1, 1898, addressed to Barton Cooke Hirst, M. D. Each essay must be typewritten, distinguished by a motto and accompanied by a sealed envelope bearing the same motto and containing the name and address of the writer.

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Original Communications.

THE EVOLUTION OF THE SURGICAL TREATMENT OF THE BROAD LIGAMENT PEDICLE.

BY LAWSON TAIT, F. R. C. S., Birmingham, Eng.

A VOLUME which I published in 1891 was devoted mainly to the establishment of severe operative procedures for the relief of diseases of the pelvis and abdomen, especially in women. It dealt chiefly with the leading features of these proceedings, in the direction of reducing their primary mortality and establishing them on the basis of giving a reasonable return for the risks run. This, in every instance, has now been fully accomplished, and if I had confined myself to such themes in my first volume, my second would have been ready long ago; but the appearance of the first effort toward the latter has been delayed till today, for I have found so much to reconsider in the second division of my task that I have had to decide to wait, over and over again, till the effort seemed to me hopeless, and I felt at last that I should leave it to other hands to accomplish. In the intervening six years the field of surgical literature has been flooded with contributions to abdominal surgery, some good, a few very good, very many indifferent and the great bulk hardly worth notice. I have waited to see if any one would take up what seems to me the logical method of advance; but I have found none and the effort which I now begin today to produce my second volume and to indicate the lines on which I have improved and still hope to improve the second as results of our operations, may turn out to be a failure as great as any which I have just deprecated; if, however, it have anything like the success which my first volume has met with I shall be pleased indeed, and in my own opinion the second will greatly transcend the first, alike in interest and importance.

As the whole history of abdominal surgery, in the slow and tardy evolution of its first stages, turned on the treatment of the broad ligament pedicle, so my first efforts in the *secondary* evolution necessarily start at the same point; and it is, to say the least of it, disappointing to see how little the importance of this subject has taken hold of the men who have written most fluently on abdominal surgery and who have brought out the most popular text-books. Mr. Greig Smith's book, for instance, will, to its ordinary reader, seem sufficiently imbued with my own teaching, yet he says concerning the treatment of the pedicle: "It has always seemed to me that this *quæstro vexata* of ovariotomy has been unduly magnified in its importance. To a surgeon accustomed to deal with amputated limbs the pedicle is, comparatively, a small matter." If this is the view generally of surgeons accustomed to deal with amputated limbs I hope fervently that no one in whom I have any personal interest will ever fall into their hands for the treatment of an ovarian tumor. Coming from the pen of a man like Greig Smith it can only mean that whilst he has written freely and with confidence, he has not seen enough ovariotomies to know how wholly different their pedicles can be, and that his comparison of them with the symmetrical and constant incidents of amputated limbs is the most perfect nonsense.

Similarly, the experience of one or two cases where chronically overdistended bladders had been tapped for ovarian cysts or even attempts made to remove them by abdominal sections, will some day cause him to repent bitterly of the following sentences: "I think that the advantages of catheterism before operation are somewhat exaggerated. I am convinced that it is unnecessary, and I have never done it." From these illustrations I am persuaded that the creation of abdominal surgery into a special branch of surgery was a wise movement, on the same ground that the development of ophthalmic surgery has upset the advice we used to find in a few chapters on diseases of the eye, oddly enough placed at the end of text-books on practice of medicine, that in all cases of squint the muscles supposed to be at fault were to be freely divided.

It may be useful on one other point to continue my criticism of Mr. Greig Smith's text-book, and that is his expression of opinion that "the operation of Houston, of Glasgow (1701), was almost certainly not a complete ovariotomy." But apart from the very conclusive fact that the patient lived afterwards in perfect health

for thirteen years—not known in my own experience of incomplete ovariotomies—Mr. Greig Smith only lays himself open again to the charge of a defective experience. I could not understand why Houston should describe his proceedings with such photographic fidelity of detail and say nothing about his treatment of the pedicle, and I assumed that he must have divided and tied it and forgotten to mention the fact. I did not attach sufficient importance to the fact that Houston had met with one of those singular eccentricities of ovarian growth, of which my own long list was interspersed with a goodly number, and it was not till I began to dig them out and carefully investigate their details that I saw the probability of Houston's description being perfect, even in the absence of allusion to the pedicle and its treatment. The clue is in his words :

I took a strong fir splinter, such as the poor in that country use to burn instead of candles ; I wrapped about the end of this splinter some loose lint and thrust it into the wound, and by turning and twining and winding it I drew out about two yards in length of a substance, thicker than any jelly, or rather like glue first made, and hung out to dry. Its breadth was above ten inches ; this was followed by . . . several large pieces of membrane, which seemed to be parts of the distended ovary. I then squeezed out all I could and stitched up the wound, and the like.

When I got a group of my own cases together it was easy to see that Houston's belonged to them and that they were a group by themselves, having peculiarities of their own, not the least curious of which is the fact that they probably present the examples, which occur beyond all doubt, of ovarian tumors undergoing spontaneous cure—examples, however, so rare that they may be entirely disregarded in any discussion of treatment.

These cases have all the same character and no description can be better than that of Houston's own experience. The cyst walls are always thin and so far as my memory and my notes serve me the tumors are sessile. In three well-marked and entirely similar cases the cyst walls had given way and the gluey contents were diffused throughout the abdomen. The cyst walls, or rather their remains, were isolated by washing out and were then found to be mere shreds, patches and strings of membrane with attached masses of cystic proliferation, by which only their inner surfaces could be recognised. These shreds and patches were quite rotten and came away from their very vague attachment in the pelvis on slight touch and no ligatures were necessary. In all three, drainage-tubes were left in at the close of the operation and large quantities

of the gluey material, more or less in solution, were discharged for some days.

My belief is that in none of these three cases was the operation really necessary. Had I left them alone the gluey material would have been slowly absorbed and the shreds and patches would have contracted and disappeared, unless they had developed malignant tendencies, and there is a suspicion that this did happen afterward in one of my cases. This is a secondary termination from the risk of which no ovariotomy is free.

These three cases are, therefore, practically on a level with Houston's, only that I did a little more scientifically and with better tools what he did effectually with a bit of stick. What is the explanation of them? That question I can only answer by speculation. True pedicle they have none and it seems to me as if and at a certain point the cyst contents have a digestive power over the cyst walls and that in time the peritoneal surfaces digest the cyst contents. It may be that when we come to the base of the tumor and pull away the rotten remains, we complete the process by a rough enucleation, but I really cannot say. I saw the base of attachment of these three tumors and Houston did not see his, therefore he said nothing about it. But I saw mine with the eyes of the blind and only at my next experience will my eyes be open enough to get a true record of the state of matters. Meantime I have said of Houston that the earliest known treatment of the ovarian pedicle was probably enucleation.

Houston's operation makes a most interesting and picturesque addition to the early history of abdominal surgery, but it had no value at all, although it was in the stately transactions of the Royal Society of London, read then as now with avidity all over the world. He found no imitators.

The first really deliberate and systematic attempt to do serious operations for abdominal disease was that of Ephraim McDowell. It was, of course, received by the only argument with which it could be met, that constant refuge of human imbecility, that McDowell was a liar, and the historical fact is on record that an editor of a medical journal who spread the libel had to eat dirt and "beg pardon of God and Dr. McDowell." Nowadays there seems to be no such fear of the Deity amongst medical editors, but some day one of them will have to make similar apologies.

McDowell's method of dealing with the pedicle was what he had learned from John Bell in Edinburgh, and which was applied

to all arteries and to everything containing an artery down to my own time—the long ligature. In a stump the arteries were tied with a hempen ligature, one end was cut short and the other left long, the series to decorate the suppurating stump for many days, the amusement of the house-surgeon and the terror of the patient being their removal by tugging as soon as they would come. Often they never came. How it did not strike someone to try how they would do if both ends were cut short I cannot imagine. But the difficulty set Simpson's ingenious mind to work with his visionary acupressure and he unconsciously cleared out the long ligature. How the short ligature came into use in general surgery I do not know, but in ovariotomy it appeared early in the history, but, most unfortunately, only for a short time.

In 1822, Nathan Smith, of New Haven, Connecticut, did his first case with the short ligature, dropping the pedicle in and followed this by a series of cases so successful that it must ever be the amazement of future historians of surgery how his example was not at once followed. His lesson was far more valuable than McDowell's and his action more philosophical, for he argued out the necessity for the short ligature and he used animal ligatures (pieces of kid gloves) in the belief that they would be absorbed—a conclusion most abundantly proved to be correct. His lessons were neglected, I suppose, on the ground that he also was set down as a liar. At any rate, he must have been so regarded in this country, for his statements were widely published here, yet the long ligature held sway till the advent of Baker Brown, in 1851. He in turn introduced the treatment of the pedicle by the cautery, gaining his idea doubtless from veterinary surgery.

A most important incident occurred soon after this by the invention and introduction of the clamp treatment of the broad ligament pedicle—an incident, according to his own authority, to be laid at the guilty door of Mr. Jonathan Hutchinson.

The short ligature was reintroduced and reëstablished almost simultaneously in 1878 by Bantock and myself, and has since remained the only method dealing with the broad ligament pedicle, except the cautery and clamp used by Keith to the last. Up to that time we were all astray except Keith, as we used Hutchinson's clamp with varying mortalities, running between the dreadful limits of 25 per cent. and 50 per cent. Keith alone, adhering to Baker Brown's method, brought down his mortality and swept the world with his brilliant success. Very soon, however, Keith's record was

beaten by the ligature and then it became manifest that the main principle to be followed for success was that of the intraperitoneal replacement of the divided and secured pedicle and that there was little to choose so far as promising results were concerned between the cautery and the short silk ligature.

As I watched Keith operate in 1880-81 I became convinced that the cautery was the ideal method of pedicle treatment, but for the tremendous time it occupied and the large amount of physical exertion involved. Keith and I, in a half-jesting fashion, agreed to stick each to his method and after a long series of cases to compare results. But Keith ceased to publish under conditions which made comparison possible and the contrast has never been made. I do not, however, think any other conclusions than those I have indicated could ever have been derived.

I have, however, been haunted ever since by the clear, thin line of parchment to which Keith reduced his pedicles, and I have looked at my own often regretting the dead lump of lost and decomposable tissue I had to leave, girt by a moist and decomposable ligature. But still it is certain that the great bulk of these difficulties were successfully encountered by that wonderful power which living tissue has for removing dead matter, a power for which so many ravenous theories have been advanced of late years without leading us much beyond the facts.

I have not yet seen a case in which post mortem examination made it evident that death was due to the ligature, though I have seen several—some amongst my own cases I regret to say—where faulty application of the ligature has been the cause of death. If the ligature is so applied that it controls hemorrhage completely, the ligature does not contribute in any way, so far as I know, directly or indirectly to death. But it has a most unfortunate way of contributing to secondary failure, to incomplete cure and to persistent and vexatious interference with convalescence.

The first of the instances of this kind as being never fatal, but as being the more common and more alarming of the two to be mentioned, is the occurrence of broad ligament hematocele. Speaking to Keith about this, his answer impressed me with the belief that the accident did not occur in his practice, and he was far too shrewd and anxious an observer to miss it if it had occurred frequently. The users of the clamp certainly did not place its occurrence on record, but with a mortality of 25 per cent. raging round them it is not likely that they would observe it if it did occur, and

when it occurred I think death must have been inevitable. I cannot imagine any more certainly fatal combination than a broad ligament hematocele and a stinking stump. But still the question stares us in the face, Does the ligature cause or facilitate the occurrence of broad ligament effusion ? I confess I strongly suspect that it does, and this is one of the reasons of my present paper.

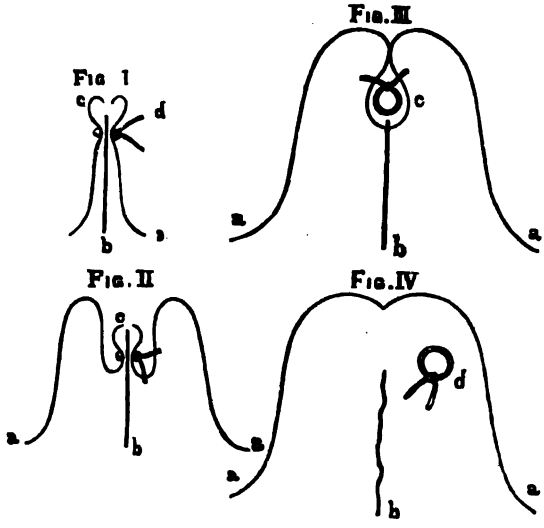
The second incident which tells against the ligature is the occurrence of a number of cases, 3 or 4 per cent., in which the garrotted stump and ligature get the better apparently of the living tissue around them, prevent the tissues absorbing them, cause suppuration, form sinuses which do not heal but go on discharging till the knot of thread is got rid of, months, it may be years, after the original operation. Sometimes they burrow into tumors of the broad ligament and are discharged into the rectum and bladder. Quite a group of these latter cases has now occurred where I have removed knots of thread from the bladder contained within a thick deposit of phosphates, some of the ligatures having been originally placed by myself, some by others. How these ligatures travel in this way is a matter of easy explanation, and that is, I think, as follows : Suppose the ligature be placed in the right pedicle, it will go (as a matter of fact three of my own have so traveled) into the bladder, whilst, if it be a left broad ligament pedicle to which the ligature has been applied, it will more likely get into the rectum. In fact, as I have often had occasion to observe in operating for pelvic abscesses, the bladder seems the road out of the right broad ligament, and unquestionably the rectum is the point of election for the natural evacuation of the left Parametric cavity.

The method of exclusion of the ligature is curious and interesting, for it seems difficult to imagine at first sight that a ligature tied inside of the peritoneum would, as a matter of course, under certain conditions, work its way through that membrane and into an extra-peritoneal district.

Its subsequent journey is a matter of notoriety and of long and protracted suffering for the patient. I could, unfortunately, point to a number of my patients who have for months, and even years, been undergoing this torture from what I call a "dead" ligature. I have made various attempts to relieve them, some, I am glad to say, successfully and others, I regret to say, with failure.

But they all got well in time and none, so far as I know, have died in the process.

It happens thus: The ligature (Fig. I., *d*) is tethered to the floor of the pelvis by the vessels and nerves it embraces. The peritoneum (*a*) is raised up and round it and finally over it by the effusion of blood, until a tube of inverted peritoneum (*c*) is made with the ligature at the base (Figs. II. and III.) The mouth of this inverted tube is closed by adhesion at its intraperitoneal end and opened at the ligature end by the subsequent suppuration, and the loosened ligature drops into the increasing and purulent cavity of the broad ligament (Fig. IV., *b*).



TAIT: BROAD LIGAMENT PEDICLE.

For these two reasons I want to get away from the ligature if I can, and after years of experimenting and thought I think I have at last succeeded. But the difficulties have been so great that I have not yet ventured to apply my plan to a living subject. Fortunately, however, for my consistency, dead animal tissue is helping me thoroughly and experiments on animals are unnecessary, for this purpose at least.

My constant feeling has been that in the cautery we should find the solution of this difficulty, and it only shows how careful we ought to be in all our experiments in surgery, that it was, and not till after at least two years' consideration of the subject that it dawned on me that we did not understand how the cautery really works. I do not think that either Baker Brown or Keith understood how they arrived at their certain and magnificent results. I am sure the bystanders did not. Everyone whom I have asked

questions on the subject has answered, "Oh, yes, sear the stump; barbarous practice, going back to the days before Ambrose Parè." But Keith didn't sear the stump. It is true he burnt a piece of it off after securing it with Baker Brown's clamp, and if searing had been the means of his success he would have stopped there. But he went on for about twenty minutes or half an hour, rubbing the clamp with his cautery and cleaning it with towel or sponge, until the onlookers got weary of this proceeding and thought Keith was finical. What he had done was really this, and I found it out only after much experimenting, that he had seized a transverse strip of the pedicle between the iron blades of his clamp, screwed the blades up tight and then heated his blades up to cooking point (that is, practically, between 180° and 190° F.) and carefully maintained that temperature till the enclosed strip of pedicle was cooked dry into a strip like parchment. Now, Keith either did not understand what he was doing, but acted merely by rule of thumb, or he kept his real reason for the cautery a profound secret. Had he seared the tissue the probability either is that hemorrhage would have occurred soon after the patient recovered from shock, or that the burnt areas would have caused pelvic suppuration—it would not have been absorbed.

Having satisfied myself of the validity of this conclusion, I set to work to contrive a better method of arriving at the same results and after many failures I have found it in the method of cautery by electricity. Knowing the resistance of a certain piece of platinum wire, I embedded it in a box of silver and isolated it by means of plaster-of-Paris or Kaolin. Two such boxes are placed face to face and connected by necessary binding screws or in the blades of a pair of clamp forceps. The boxes are placed opposite each other on a pedicle and are screwed together. An electric current of known strength and under the control of a rheostat is now turned on to heat the boxes, or better still the boxes are heated first and then applied to the pedicle, as this method saves time. The boxes are, of course, enclosed in ivory, or other bad conductor of heat, to save alike the heat and the tissues for which the heat is not wasted, or are well packed by sponges. The apparatus I now show will so cook an ordinary pedicle that hemorrhage will be impossible and suppuration unlikely in the extremest degree, in a space of about six to eight minutes. The same principle has been applied to instruments for the arrest of parietal and omental hemorrhage and for the simplification of the operation of total removal of the uterus, also for operating on hemorrhoids. I do not advocate my proposals as likely to reduce the primary mortality of operations. I believe that has been done so far as may humanly be possible. But I am quite sure that they and some others on similar lines will go far to relieve our secondary results, being more satisfactory and encouraging alike to our patients, ourselves and to the art of surgery.

BIRMINGHAM, June, 1896.

THE RELATIONS OF MEDICAL EXAMINING BOARDS TO THE STATE, TO THE SCHOOLS AND TO EACH OTHER.

By WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.
Examiner in Obstetrics, New York State Medical Examining and Licensing Board.

Presidential Address before the National Confederation of State Medical Examining and Licensing Boards, at its sixth annual meeting, held at Atlanta, Ga., May 4, 1896.

IN ASSUMING the duties of this chair my mind instinctively reverts to its first occupant, who as you all very well know was the founder and organiser of this confederation, a pioneer in medical educational reform in this country, an earnest and forceful advocate of every reasonable method of advancing the standard in the United States. Though he was our leader he was also our companion and friend, and if he were yet living he would most likely continue to occupy the chair. To be regarded as worthy of the succession is an honor that I fully appreciate. Let us always keep green the memory of John H. Rauch.

INTRODUCTION.

There is food for much thought in undertaking to direct the affairs of this organisation. It is a body unique among medical societies. It is without a parallel in medical history and has not even a complete record of its own work. This fault, however, I hope will not happen in the future. The chief function of the confederation is to discuss questions relating to medical examinations for license, but it cannot bind its members to follow its recommendations; nor does it so desire. In order to make the work of such a body effective all adhesion to it must be voluntary in character, not coercive.

There are, however, many collateral questions to consider if not to settle, but everything must be done with circumspection. We are on the threshold of new conditions. We may, therefore, with great propriety adhere to, if not adopt for our guidance, the ancient maxim "*Festina lente.*" We are without traditions, without precedents, without heredity. There is much wisdom, then, in making haste slowly that we may proceed to accomplish the end sought all the more surely.

POINTS OF AGREEMENT.

Of one thing I assume we may feel sure—namely, that there are no differences of opinion among physicians even of the several

so-called systems of practice recognised by law — intelligent physicians — as to the propriety, even the necessity, of improved methods in medical education and increased standards of acquirements for entrance to the profession of medicine. It has taken considerable time and occasioned some severe contention to reach even this first landing-stage, but I think we are all agreed at last on this point and I also believe the agreement will endure.

As to just what these reforms ought to be may not yet have been determined with unanimity, but I shall assume that all of the class named are of one opinion on some that are necessary. One of these is that there must be a better standard of academic preliminaries; another that ought to bring us together is that four years is little time enough to be devoted to medical collegiate training; and still another we ought to be united upon is, that an examination of each graduated physician by the state, separate and apart from the schools, is a necessary condition precedent to obtain a license to practise. These are three cardinal principles it seems to me on which reforms should be grounded, and it ought to be possible for all physicians to unite in an effort to secure legal enactments in all the states establishing this triad of essential principles.

PRELIMINARY REQUIREMENTS.

In regard to preliminary requirements for matriculation in a medical school, there may be some difficulty in establishing at once in every state a standard as high as should be, but it seems as if we might agree upon a minimum below which no person may enter upon the study of medicine. It is as requisite for a physician to possess an education as it is for him to be a gentleman.

For myself I would insist that a high school diploma ought to be regarded as an index of the lowest limit of literary attainment for the novitiate. An entrance examination should be required of all who do not possess such a diploma or its equivalent, such examination to be conducted independently of the medical colleges. As I would have the graduate examined by the state for license separately and apart from the college, so I would have the candidate for admission to the study of medicine also examined by the state to determine his qualifications to enter upon that important duty. In other words, the state has the right to determine the qualifications of all who enter upon the study of medicine, as well as those of all who after graduation propose to enter upon the practice thereof, and I am in favor of its exercising both functions.

Not until after four years' study in a recognised medical college and the receipt of a diploma therefrom should a physician become eligible to license by the state, and then only upon due examination by its medical examiners, none of whom should be medical college teachers. It has been claimed by some teachers that state examiners are neither competent to propound proper questions nor to mark them at their true value[1], but I need not absorb valuable time in the discussion of a question that seems to be already definitely settled in the affirmative.

LIMITATIONS OF STATE CONTROL.

Thus the state again steps in and exercises her right to determine as to the adequacy of the training a physician has received in the schools, and it issues a license to practise only to those found qualified. Hence, there are three stages of preparation for medical practice: first, a preliminary training that shall at least equal that of a high school graduate; second, four years' study in a legally incorporated medical college; and, third, examination and license by a state board, none of whose members are teachers in a medical college.

In two of these stages the state plays an active part — namely, in the first and the last. The state must determine as to the competency of those who enter upon the study of medicine and also the qualifications of those who are admitted to practise. But this is the limit of the state's authority; beyond this it may not interfere: that is, it is not competent for the state to interpose its authority during the medical collegiate life of the student. Here the teachers are supreme and must be left untrammeled. They must be allowed perfect freedom to teach in their own way. Their function is to teach their students so well that they may pass any of the state boards, and they may be trusted to do it, else they will suffer not only the humiliation of rejected candidates but their classes will diminish in size, and, except in the endowed schools, their incomes will correspondingly shrink. Students will not be slow to detect this nor to select the medical college that will prepare them with certainty to obtain the state license.

While, therefore, the state may not interfere, as we have said, during the four years of medical college training, it yet exercises a watchful care in granting charters to medical colleges, issuing them only where the applicants are shown to be teachers of undoubted competence and men of integrity. A state must also be sure that the

number of schools within its boundaries is not too large.[15] Moreover, it should specify the essentials to be maintained, such as laboratories for teaching chemistry, physiology, anatomy, bacteriology and the like; also that clinical teaching must be pursued and that hygiene, preventive and state medicine, and lastly, clinical midwifery must be taught,—the latter to the extent that each graduate must have attended at least six cases of labor.

SHALL THE EXAMINATIONS BE DIVIDED?

It has been held by some that it would be better to divide the state examinations, and at the end of the second year let students come up before the state board for examination in the so-called fundamental branches—anatomy, physiology and chemistry. This would unload the mind, say the advocates of this plan, of a great anxiety, and thus better prepare students to cope with the practical subjects — surgery, obstetrics, practice, materia medica, pathology and hygiene. It is doubted if the state can legally lay its hands on a student after he has passed the entrance door of a medical college, even for the purpose of compelling a division of the examination as has been proposed. The most it could do in the premises would be to *permit* him to take an intermediate pass examination if he so desired; but unless this were made compulsory it would doubtless fail to commend itself to any considerable number and so fall short of its purpose. Besides, it could not be made to apply to foreigners or to students from other states. Taken altogether this plan may be not only impracticable but most likely impossible to establish. Moreover, the theory of the state examination is that it is a post-graduate scrutiny and not an undergraduate test.

A QUARANTINE AGAINST THE UNQUALIFIED.

The number of states that in some manner supervise the practice of medicine, now proportionately large[2], is constantly increasing. Ohio is the latest convert and it is a genuine pleasure to welcome her to the fold. Our friends in that great common wealth have occupied a trying position for some years, but at last have scored a good start and under the discreet leadership of able men who are handling the reins will reach the goal. Under the ratio of progress now making it will not be long before all the states will in some form or other establish a quarantine against unqualified doctors. But the great desideratum is to persuade each

and every state to enact laws that shall require separate examination after graduation in order to obtain license to practise. Until each and every state shall deny the right to practise, except through license obtained on due examination and after graduation from a legally incorporated medical school requiring academic preliminaries and a four years' course, the struggle must continue.

By a law of the state of New York, passed March 21, 1896, it is provided that all candidates for admission to the state examination must have studied medicine not less than four full *school* years *of at least nine months each*, including four satisfactory courses *of at least six months each*, in four different calendar years in a medical school registered as maintaining at the time a satisfactory standard.[1] This section is to take effect January 1, 1898. It is further provided in the same act that New York medical schools and New York medical students shall not be discriminated against by the registration of any medical school out of the state, whose minimum graduation standard is less than that fixed by statute for New York medical schools.

It will be readily understood, in the light of the foregoing extracts from the statute, how impossible it is for New York to recognise the licenses of any state that maintains a standard lower in any respect than its own. Nevertheless, whenever any state shall demand the same preliminaries, an equal collegiate training, together with a commensurately high final examination, certainly it then will be a pleasure for New York to establish reciprocity with it.

It is not my purpose to forestall the discussion on this question that is to come up later at this meeting, but it is not easily possible to omit some mention of this important subject, inasmuch as it is just now very much in evidence all over the country. New York has been criticised[2] by other states for not recognising their licenses, but her position in refusing to indorse the licenses from states in which the standard is lower must be conceded to be impregnable. To recognise licenses from states in which the requirements are less would be to deal unjustly with her own citizens, and to yield advantages over them to those coming from without her boundaries.

A NATIONAL LICENSING BOARD.

Another question that has been raised in certain quarters is the propriety of creating a national licensing board. Dr. C. E. Far-

1. The italics in this sentence are in the original bill.

num, of San Francisco, I believe, has suggested that such a board be detailed from the medical corps of the army and navy[4]; and that the licensees of this board receive a degree or title similar to the English F. R. C. S., such, for instance, as "Fellow in American Medicine and Surgery."[1]

It seems to me that a national examining or licensing board is not only unnecessary but quite impracticable at present, and I doubt if it ever becomes a measure of expediency. Up to the present time, congress has very wisely interpreted the constitution to relegate police regulations to the several states and has declined to interfere in such matters. The power of congress to create such a board, even were it so disposed, is seriously questioned by well-informed men both of the legal and medical professions. Moreover, the vast machinery required to carry on the work of such a board in territory of such wide domain as ours, would at once suggest an adequate reason for condemning the scheme even if there were no other. As to the proposition of our friend from the Pacific coast to create a board from the public services that shall have power to confer a special degree, it would appear to most of us, I am sure, that our essential need now is not more degrees but better education. Furthermore, we need not superimpose this Herculean task upon our good friends of the medical corps of the army and navy in addition to their already burdensome duties and responsibilities.

Let us wait then until the states themselves — those that have not already done so — advance their standards to the line of requiring preliminary education equal to a high school course, four years' medical collegiate training and a separate state examination for license after graduation. When this is done in our fifty-three states and territories[5] it will be quite time enough to delegate to the general government the duties and powers now exercised by each state in this matter.

A UNIFORM MINIMUM STANDARD OF REQUIREMENTS.

While, therefore, it is practically impossible at present under existing laws to establish a uniform minimum standard of requirements in all the states, there is yet hope that year by year this desideratum may be more nearly approached until ultimately it shall be attained. Amendments to imperfect laws must be fostered and states without practice laws must be encouraged to enact them, to

1. In a personal letter Dr. F. claims to suggest an examining and not a licensing board, but the difference is not material in this relation.

the end that their citizens may not be discriminated against by the other states.

It has been suggested that a committee of supervision might be created, by the examining boards of those states that require examination after graduation for license forming a syndicate, and each appointing a representative to such a central body. The duties of this committee merely would be to formulate a uniform standard for the guidance of the state boards represented in the committee. As fast as states enacted or amended their laws to meet the established grade of requirements, their boards would be entitled to representation on this central committee; so, whereas, only a small committee at first would be created, in the end it would comprise a membership equal to the whole number of states and territories.

RECIPROCITY OF LICENSURE.

Between the states represented in this committee, of course, there would be established a reciprocity of licensure. But let us pause for a moment to inquire as to the necessity or desirability of reciprocity. I confess that I am not among the number that regard reciprocity as of great immediate importance. Whenever a sufficient number of states shall advance their standards to a common minimum level of requirements, and these shall demand first, a high school course as an entrance minimum; second, four years' medical collegiate training as a condition for a medical degree; and, third, a separate post-graduate examination for license—when, I repeat, these shall be the requirements for the practice of medi cine in at least twenty states, it will be quite time enough for those commonwealths to establish reciprocity among themselves. Until then let the migratory physician pay the penalty of his itinerancy by taking the examination of his new-sought state. If he is well equipped he will be perfectly willing to do so; if not then let him seek another occupation. Whenever twenty states shall form such a reciprocal syndicate it will not then be long before the others in self-protection will advance their standards to the minimum these shall have established.

THE STATE SHOULD EMPLOY ONLY LICENSED PHYSICIANS.

It is impossible to create new conditions such as we are entering upon without meting out hardship to some individuals. All border line students and young physicians naturally feel themselves aggrieved, and they vehemently demand special rulings or statutes to fit each particular case. But we must begin somewhere to draw

the line between the old way and the new, and the few ought to yield gracefully to the many. The particular good must not stand in the way of the general good.

The state is ever jealous of her rights and of the welfare of her citizens. She is particularly so of their good health, which means economy. She has assumed to decide who shall and who shall not minister to the sick and injured and she especially has determined to administer the laws of prevention with a constantly increasing rigidity. Her public health officers must be men of education and executive capacity. It will not be long, I trust, before no person will be commissioned in any of these great offices who does not possess a state license. If this were made the rule we would soon hear less complaint in regard to the state examination; while, on the other hand, every spirited young graduate would be anxious to take it. Such action would tend to remove prejudice against the system and would in many ways strengthen the hands of those who are engaged in this reform.

HOW SHALL FOREIGNERS BE DEALT WITH?

One of the difficult problems confronted is in dealing with foreigners. These men come to this country in large numbers without knowledge of our language, where they are told that everything is as free as air, hence they expect to be admitted to practice at once without let or hindrance. Finding a state examination necessary they plead poverty and demand leniency because of their imperfect knowledge of the English tongue. The question presented may be formulated about as follows: "Shall one rule be established for our own countrymen, and another less rigid for these strangers?" I trust not and I hope the answer will be a unanimous negative. The injustice of such discrimination against our own citizens is too apparent to admit of argument. I would not make one rule for one class of candidates and another for another class, but I would administer the laws with impartiality, governing all alike.

If one of our fellow-citizens should present such examination papers to a foreign board as these men generally offer to most of ours, he would be denied even the semblance of a hearing. His application would be dismissed without ceremony. Let it be remembered in connection with this that the country is not suffering for the want of doctors, and can wait without material injury until these men shall master the English language and otherwise con-

form to our rules,—until they can place themselves on the same footing in every respect with our own countrymen. When they present themselves in a clear identity, with a legal diploma properly authenticated, and take our examination successfully, then we will gladly issue to them licenses to practise, but they should be made to understand at once that they can obtain them in no other way. This question is attracting the attention of medical journals in different sections of the country and has lately been discussed by one[6] in a most decided and uncompromising manner.

BOARDS NOT ANTAGONISTIC TO THE COLLEGES.

It has been asserted in certain quarters that state boards are antagonistic to colleges, that they are setting up standards of their own, and that their rules are oppressive to the schools. Nothing, in my view, could be further from the truth. The real facts are that the boards and the colleges are working along parallel lines to accomplish the same end — namely, an improvement in the quality of physicians admitted to practice in the United States. Moreover, there is a harmony of action between them that is remarkable, considering the radical changes that have necessarily been wrought in methods of teaching as a result of the practice laws. If the schools in many instances have waited for mandatory laws to raise their standards and increase their years of study, they must not complain that the rank and file of a great profession has risen in its might, and through its constituted state medical societies demanded laws of the several state legislatures that shall advance the cause of higher medical education. The examining boards are merely the servants of the people in this matter,—are simply instruments through which their will obtains definite expression.

There can be no antagonism against the schools in this needful reform. They are as much interested in it as are we. We are not enemies, but friends. The college teachers are more than glad to be relieved of much of the detail of educational reform, and thus to be enabled to address themselves solely to clinical, laboratory, recitative and didactic teaching. They prefer not to concern themselves about entrance examinations, thus avoiding the thousand and one questions that are constantly being put by the students on this and kindred subjects relating to detail. The object of the schools is to see to it that young physicians are properly equipped to practise medicine, while the purpose of the boards is to deter-

mine that physicians have been adequately instructed to merit a state license. Each has its appropriate place; each serves a distinct purpose.

In a recent conversation a distinguished teacher in one of the first medical schools in the land remarked: "The faculty of which I am a member desires to teach our pupils so well that they may be enabled to pass any examining board,—army, navy or state. If perchance we fail to do so now and then, or if some escape our scrutiny, we are only too glad to have the state board reject such and send them back for further training. We approve of the good work doing by the examining boards, and are glad to have them supervise our methods to the end that incompetent doctors may not be sent out from our college." Words of this character coming from such a distinguished source cannot fail to do good. They express the entire relationship that ought to exist between the schools and the boards. If teachers all felt this way and so expressed themselves whenever occasion presented, it would serve to strengthen the hands of the examiners, increase their usefulness and so benefit the cause of educational progress.

I fear, however, teachers in many instances have engendered in the minds of students a dread of the boards and, by innuendo if not by words, belittled their work.[7] Students are taught in some schools in a way to lead them to suppose that the only object of colleges is to prepare them to successfully compete for the state license. It is forgotten, apparently, that the real aim should be to teach them how to be good physicians. If they would stimulate in their classes a respect for the boards and instruct them that the state license is a parchment to be eagerly sought and highly prized when won, it would tend to create an atmosphere around them that would prove of lasting benefit to the cause. It affords me pleasure, however, to refer in this place to two notable exceptions to the condition I have just delineated. Prof. Hinkel, of Buffalo, devoted his introductory lecture in a college course not long ago to the subject of state examination for license,[8] in which he fully set forth the system in operation in New York, and instructed the students as to the importance of the measure. Prof. Tucker, of Albany, chose as the title of his opening lecture last fall at the Albany medical college, "State control in medicine."[9] He, too, carefully analysed the new system and gave deserved credit to the examining boards. Undoubtedly there have been many similar instances where teachers have taken occasion to speak well of examinations by the state for

license, but I need not refer to this subject in greater detail at this time.

MEDICAL JOURNALS ARE AIDING.

It is a satisfaction to know that the medical periodical press is very nearly unanimous in its support of the principles advocated in this paper. Moreover, it is an active ally that is constantly busy in disseminating information on the subject, and urging on the most efficient and highest order of reform. While it is true that at first many were sceptical, some were lukewarm, and a few were open enemies of the scheme, now it is a pleasure to affirm that there is not a single medical magazine of standing, weekly, monthly or quarterly, between New York and San Francisco and from Maine to Texas,[10] which is not an aggressive coadjutor, while many are propagandists of the faith. These magazines are leaders in thought and moulders of opinion, and under their influence we may hope soon to advance and unify standards, to a point where all states and territories of the Union will have practically established the same requirements for obtaining license to practise.

A VOICE FROM THE TRANSVAAL.

A strong argument for uniformity of methods and standards throughout the Union is presented, incidentally, in a recent letter addressed to the *Medical Record* by Dr. Gordon Messum, chairman of the Transvaal Government Medical Board. The rule followed there is for the board to register only such physicians as present diplomas which entitle the legitimate holders to practise in the whole of the country where such diploma has been issued, and for which a minimum of four years' medical study is required. The board finds it difficult, writes Dr. Messum, to decide on the merits of the various diplomas issued in the different American states, (is there special wonder?) and asks information on the following points:

1. Are there state universities or colleges whose degrees are recognised as giving the right to practise throughout the whole of the United States of America?

2. Can we obtain a list of universities or colleges which demand a four years' course, and can the approximate date be given when such four years' course became compulsory in such colleges?

3. Is there a list of the universities and colleges whose degrees are recognised by the medical board of the United States of America?

4. Are there registers of the qualified men in each state, or is there a general register for the whole of the United States of America on which the name of every qualified man can be found?[11]

Here is the South African Republic refusing to admit to practice any physician with less than four years' collegiate medical training, while most states in the Union yet hesitate to establish that minimum. When this confederation has made adequate answer to the voice from the Transvaal it will have accomplished a very essential part of its mission.

A CONDITION OF UNREST.

The fact must be apparent to everyone who has given the questions arising out of state licensure much thought, that many of the difficulties which we are meeting, some of which I have considered, arise from the fact that we are in the midst of a period of unrest. The doctors are clamorous, legislators are feverish, and students are excited. Nearly everybody having to do with the subject directly or indirectly seems to be uncertain as to opinion and unstable in action. Many appear to be standing on tip-toe, all agog, waiting to hail something newer and stranger than that which went before. It is not unlike the excitement that follows upon the discovery of a new bonanza; but a period of quietude will soon follow if this confederation assumes its appropriate place and wisely exercises the functions that properly belong to it. It must begin now to take cognisance of our environment and to make suggestions for its betterment.

It is this restless spirit that gives birth to so many incongruous and untimely suggestions. Now it is a proposition to divide the state examination; then to create a national examining and licensing board; again, a demand for reciprocity of licensure, and at another time legislatures are appealed to to reduce the barriers to entrance upon the study of medicine, as recently happened in the state of New York. These and other propositions are hurled at us one after another, singly or in groups, with a rapidity that would dismay any but the intrepid, and with an audacity worthy of disciplined ranks. And this before the state boards have fairly formulated their work, or, at any rate, before any tangible results of the system are manifested. But let it be remembered that "thrice is he armed that hath his quarrel just," and so we may take much comfort in the thought that the people, though slow to arouse themselves to reforms, when once determined on a line

of policy that is just and needful, are seldom turned aside until their full purpose is accomplished.

CONCLUSION.

But I detain you too long from the enjoyment of the intellectual feast that awaits you. The recent action of Harvard University in giving notice that a degree will soon be required for an entrance to its medical school,[12] and the statement that the University of Pennsylvania will raise her standard,[13] indicate that a movement has commenced of a most substantial nature. Though there is a vast field before us in which to labor for the advancement of educational standards there is every reason for encouragement from the support that medical teachers, medical journals, educators and many other people of intelligence are affording us.

This organisation ought to be the means of hastening on the work to a considerable degree. An interchange of thoughts and methods through the annual conferences of this body will tend to unify and standardise much of the work that otherwise would be without system or harmony. This body, to borrow the thought of another, should act as a kind of professional clearing house,[14] and I trust it will soon come to be so regarded by all interested in educational progress. Let me also suggest that the *Bulletin of the American Academy of Medicine* be made the medium during the intervals of our meetings for an interchange of thought on all matters of interest to the confederation. It has been made, by formal action, the official journal of this body, and its columns are open to all our members. The American Academy of Medicine and the Association of American Medical Colleges are to be regarded as our allies in the field in which we labor. It is fitting, therefore, that these three bodies, between which there is near kinship, should record their work in the pages of the same magazine, which is a journal devoted especially and exclusively to improvement in medical education.

Finally, let me urge united action by all the friends of medical progress everywhere throughout the land to the end that the education of American physicians may be brought to a standard that shall be high enough at least to make them the peers of their European confrères. The reproach cast upon us through a refusal to recognise our diplomas in Europe cannot be overcome until we rise in our might and determine to wage a relentless war against ignorance, which shall not cease until an American state license to

practise medicine is recognised as a passport to good professional society in every civilised country in the world.

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12. Boston Med. and Surg. Jour., Jan. 9, 1896, p. 46.
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15. Ohio has determined lately that colleges shall not be recognised in cities under 50,000 inhabitants.

284 FRANKLIN STREET.

HISTORICAL SKETCH OF THE WORK OF THE BOARD OF CENSORS OF THE MEDICAL SOCIETY OF THE COUNTY OF ERIE.[1]

BY EDWARD STORCK, M. D., Buffalo, N. Y.

IN COMPLYING with the request of the committee of arrangements to furnish some sketches of medical events in Buffalo with which I have been identified and give an account in regard to my presidency of the society, also of my work on the board of censors, I will relate, or rather recall, some of the actions and accomplishments of the board during the twelve years that I served as its chairman. Though most of it is on record in the minutes of the society and in the files of the BUFFALO MEDICAL JOURNAL, still it may be of some interest to our younger members on this occasion and serve for reference in the future.

I was president of the society in the year 1878, after having been a member twenty-four years. In my address to the society I made the following suggestions: "My experience as chairman of the board of health of this city, in 1872, has fully convinced me that a medical board, consisting of at least three members, two of which should be medical men, is absolutely necessary. In time

1. Read at the seventy-fifth anniversary of the Medical Society of the County of Erie, January 14, 1896.

of an epidemic, like smallpox, the people are at the mercy of the scourge with a board of laymen."

In a report made afterward to the society I submitted a bill to create a medical board of health, which was approved and a committee was appointed to secure its passage by the legislature. The common council, however, refused to endorse the bill. A former health physician, who still holds an office through his tactics, got a resolution passed against it. The provisions of the bill were similar to those embodied in our present charter.

In 1881 I was made chairman of the board of censors. At this time quackery in medicine was rampant in this county and throughout the state. Bogus medical colleges sprang up in New York and other cities, that operated under a charter obtained by the provision of an old law that gave colleges and institutions of learning or scientific and benevolent schools authority to issue diplomas. Such diplomas were sold for the same price as the Buchanan college in Philadelphia sold them, $25 apiece. County medical societies granted licenses to practise medicine to old practitioners who had never seen the inside of a medical college and who could not tell the location of the perineum. Some of the regular schools did a flourishing business as so-called doctor mills. Their aim was not so much to impart a large amount of knowledge to the students as to do a big business in turning out large graduating classes. Ignorant, illiterate persons were let loose upon the community as Doctors in Medicine and most of them settled down in this state.

The regular profession in the state was opposed to any legislation to regulate the practice of medicine. There were medical laws upon the statute books, but they were dead letters; no one had the moral courage to enforce them.

This was the status of medical education and the practice of medicine in the state of New York in 1880. I thought there was a great field to operate upon, hence I decided to make it a study and to endeavor to effect some reforms. A few years previously I had introduced at a meeting of the state medical society, when I was a delegate, a resolution to submit to the legislature a bill to regulate the practice of medicine and medical education. The resolution was voted down. Next year I had such a bill introduced in the legislature by one of the members from Erie county, that passed the house and senate. But when it came before Governor Hoffman, some of my orthodox colleagues in Albany pre-

vailed upon him to veto it on the ground, as I was informed by telegram, "that the law would tacitly recognise homeopathy."

During the following session the bill was introduced again but pigeon-holed in the senate committee. In 1880 we finally succeeded in passing the medical registration law, which was signed by the governor and immediately went into force.

The first important step taken after this law passed was to effect a joint meeting of the board of censors of this society and the homeopathic county medical society. We jointly decided to execute the law, compel all legal practitioners to register their diplomas and proceed against all persons illegally practising medicine in this county. The result of our action is known to you and is on record in the reports of the board of censors. The itinerant quacks and charlatans were mercilessly dealt with as soon as they opened shop in town and got their goods well advertised in the daily papers. We didn't wish to deprive the newspapers of this profit, although some of them were quite severe on the censors for interfering with these so-called doctors or professors and their business. In handling these itinerant quacks many amusing incidents occurred, but to relate any here would make my paper too long.

The board then directed its attention to the bogus medical colleges in the state and instituted legal proceedings by applying to the attorney-general for a writ, which was granted and afterward argued before Governor Cleveland. Some of the ablest legal talent from New York and Buffalo was summoned by these schools, but the writer and his colleagues knocked them all out. The governor declared their charters null and void. Later on a regular medical school in Buffalo—Niagara University Medical College—procured a charter through a special act of the legislature. The board of censors protested and appeared before the governor. The bill was vetoed and the medical college was compelled to obtain its charter and organise under the provisions of the existing law.

The first action taken in favor of creating a state medical examining and licensing board was by the board of censors and the committee on legislation of this society. A bill to that effect was drawn and submitted to the state medical society, by which it was approved and introduced in the legislature. The bill had a hard passage. Fierce opposition was made by some of the New York colleges and after it had passed twice it was finally signed after a hard fight before Governor Hill, in June, 1890, and went into force in September, 1891.

When the state examining and licensing board went into operation my vocation as chairman of the board of censors seemed practically gone. To its chairman was left the conviction that it had been a thankless task for twelve years, but there was also the satisfaction of having done his duty and accomplished the object in view—namely, the necessary reform in the practice of medicine and medical education in the state of New York.

220 East Eagle Street.

Clinical Lecture.

REMOVAL OF GALL STONES—OVARIAN CYST—SPLEEN—KIDNEY AND URETER, EN MASSE.

By ROBERT T. MORRIS, M. D., New York.

I.—REMOVAL OF GALL STONES.

THIS first patient has suffered for several months with pain in the region of the gall bladder, but has never had attacks of biliary colic and has never been jaundiced. He has been examined by several physicians, some of whom readily palpated the hard gall bladder, while others could not find it. We shall remove the gall stones by operation, believing that modern surgical methods are more to be respected than nature's ways in these cases.

My incision, about four inches long, exposes the margin of the liver, and we find the gall bladder firmly adherent to surrounding structures. Adhesions separated with a sweep of the finger, gauze is tucked about the gall bladder to keep things neat. I pass a loop of catgut through the wall of the gall bladder to serve as a handle, and then make an incision through which thirteen faceted gall stones are removed. Clear mucus flows from the incision. A little of this mucus is transferred to a culture tube, in order to determine what species of bacteria are present. We expect to find colon bacilli in the mucus or in the stones, because we have lately come to believe that gall stones are caused by colon bacilli, which climb up from the bowel into the bile ducts and cause a precipitation of cholesterin out of the bile. I find one small stone caught below one of the valves at the entrance to the cystic duct. Calculi

1. Delivered at the New York Post-Graduate Medical School, April 2, 1896.

are often caught at this point and it is difficult to move them up or down. This one is easily pushed through into the common duct, as it is a small one. If it were larger I would cut through the wall of the duct, take it out and then suture the duct. The incision in the gall bladder is sutured and the gall bladder allowed to assume its normal position. That makes the simplest operation. If the walls were thinner or if they were ulcerated, I would use the Murphy button and fasten gall bladder to the intestine, or would fasten the gall bladder to the abdominal wall and leave a fistula to close spontaneously. The abdominal wound is closed in tiers and the lesser omentum is arranged in a trough above a small niche drain, after sprinkling aristol along the line of the niche, so that if bile should leak out the niche will care for it. The trough of lesser omentum will guide it to the surface and the aristol coagulum will prevent leakage into the general peritoneal cavity. If I had cut and sutured a bile duct, the same technique would have been employed. Pure bile in the abdominal cavity does no harm, unless in very large amount, but if colon bacilli escape with it they may excite a peritonitis.

II.—CYST OF LEFT OVARY.

The next patient is a nervous young woman. She has a cyst of the left ovary about as large as a butternut, but simple in its nature and evidently consisting of hydropsy of a Graafian vesicle. The cyst is shelled out, leaving the ovary. Most of us like to be conservative in our ovarian surgery nowadays, and we spare where some operators formerly wasted. The operation is done through a very small incision in the abdominal wall, and I am careful to make a nicely sutured wound because we are to avoid marring our patients. This patient has an adherent prepuce, so it is best to circumcise her after freeing the prepuce from the glands with the handle of the scalpel. Preputial adhesions have the same influence in girls that they have in boys, but they are much more common in girls.

III.—REMOVAL OF SPLEEN.

The third patient has splenic leucocythemia and the lymphatic glands seem to be everywhere enlarged. He has one white blood corpuscle to every four red ones. The spleen is so enormous that it crowds the heart and lungs, and the patient breathes with great difficulty. He has been treated with red bone marrow for two months without benefit. It is always best to try red bone marrow

treatment, because some of these cases are very much improved by it and occasionally one is apparently cured. I now make a median line incision, reaching from the sternum nearly to the pubes. Bowel is kept out of sight by sterilised towels. About two quarts of free peritoneal fluid escapes. I ligate five arteries running into the pulp of the spleen, cut the suspensory ligament from the diaphragm, and cut the spleen-stomach ligament. The spleen is separated from parietal connective tissue attachments with the flat hand and removed. On the scales we find that it weighs eight pounds and twelve ounces. The diaphragm does not contract. It has been distended so that it is paralysed and it feels more like a soft membrane than like a muscle. A hypodermatic injection of 1-12 grain of strychnine is given in the hope of stimulating the diaphragm into action. The patient has shown very little sign of shock and he has lost only the blood that was in the spleen and about a pint that has trickled out of torn parietal connective tissues, but as he cannot afford that loss we infuse two pints of physiological saline solution. This infusion apparatus is made up on the spot by putting a big hypodermic needle through a cork and sticking the cork into the rubber tube of the syringe. The whole thing is then boiled for five minutes for sterilisation. A transverse incision through the skin exposes one of the veins of the arm. The vein is pulled out of its bed and allowed to rest upon a needle passed under it. The hypodermic needle of the fountain syringe is passed into the vein and two pints of saline solution allowed to run into the circulation. The patient's pulse immediately becomes very full and strong. This is a very simple and safe way to make up for loss of blood. The abdominal wound is closed and you observe that, except for the dyspnea, the patient is in remarkably good condition.

IV.—REMOVAL OF KIDNEY AND URETER EN MASSE.

I wish to report upon the case in which I removed the left kidney and ureter *en masse* a week ago. The specimen was sent to the laboratory and Dr. Brooks finds that the kidney was the seat of advanced interstitial nephritis. The ureter walls showed simple hypertrophy. As some members of the class were absent at the time of operation, I will state that this case was one in which the ureter had become obstructed by hyperplastic connective tissue resulting from a sigmoiditis, which at one time was probably perforative, as the patient had a general peritonitis beginning at

that point. The patient after that suffered from ureteral colic. On palpation before operation I found that the left ureter was larger than the right one. Many physicians who have not had occasion to develop the sense of touch acutely, are not able to palpate ureters easily, but after a little practice they will find the ureter where it crosses the psoas muscle if they ask the patient to contract his psoas muscle a little, and having felt the ureter at that point, it is readily traced up to the kidney and down to the pelvis if the patient is not too fleshy. Almost anyone can palpate the free edge of the liver. Then, as his fingers become trained, he distinguishes colon from ileum. He later learns to find the normal appendix, the sub-peritoneal lymph glands, the iliac vessels, the ureter, the Fallopian tubes, and, in fact, feels more at ease with his fingers than with his eyes in abdominal work. In this case I made an incision from the left costo-quadrato angle to a point near the anterior superior spinous process of the ileum and extending down to the peritoneum. The kidney was brought into the incision and when its vessels were ligated and cut loose I used the kidney for a handle and easily stripped the ureter away from peritoneum until we reached the point of obstruction at the brim of the pelvis. It was exceedingly difficult to work out half an inch of ureter at that spot, but as soon as it was free the rest of the ureter was easily separated down to the trigone of the bladder. I broke off the ureter at the trigone with my finger nail, trusting to the valve action of the bladder wall for keeping the lumen closed afterward. I was pleased to find that no longer incision was required, as the one first made allowed the whole hand to be passed to the brim of the pelvis behind the peritoneum, and the finger in the pelvis readily came in contact with the bladder when the ureter was pulled upon sufficiently to stretch the bladder upward a little.

NOTE.—At date of writing, April 24, 1896. The spleen patient died on the night after the operation, apparently from asphyxia. The diaphragm would not perform its function in the respiratory act and the patient's dyspnea was distressing to behold. The other patients are practically well.

49 WEST 39TH STREET.

DOGTAIL SUTURES.—It is said that the tendons found in the tail of a dog make better sutures than either catgut or kangaroo tendon, when properly prepared in sublimate.—*Peoria Medical Journal.*

Society Proceedings.

PROCEEDINGS OF THE SIXTH ANNUAL MEETING OF THE NATIONAL CONFEDERATION OF STATE MEDICAL EXAMINING AND LICENSING BOARDS, HELD AT ATLANTA, GA., MAY 4, 1896.[1]

THE president, Dr. WILLIAM WARREN POTTER, of Buffalo, called the meeting to order at 10 o'clock A. M., in the assembly room of the Hotel Aragon, and introduced Dr. J. C. OLMSTEAD, member of the Georgia State Board of Medical Examiners, who welcomed the confederation in the following words:

Mr. President: On behalf of the medical profession of Atlanta and the Board of Medical Examiners of this state, it gives me pleasure to welcome you to this, our "Cracker City of the Red Hills," and to the glorious old state of Georgia. The presence in our midst of your distinguished body is indeed an honor that we deeply appreciate. Representing as you do a legislative force emanating from our own profession and of comparatively recent date, which has become most potent in its influence for good upon medical education and qualification, your conventions, proceedings and wise councils must ever command the interest, sympathy and high respect of all who have at heart the true welfare, honor and elevation of the medical profession.

The influence for good and the consecration of the public weal attained through many obstacles, despite the political demagoguery and prejudice inspired generally by ignorant or selfish men, in the institution of State Medical Examining Boards, has already been so clearly demonstrated that we have good hope that the day is not far distant when every state of our glorious union will have its independent, unprejudiced examining board, which shall stand as an impregnable bulwark in defense of the ignorant and weak against the selfishness and ambition of those known by the name of physician only.

And as the tendency of modern science, like the political status of our country, is toward unity and a completed whole, so in ours, the most liberal of professions, the harmony, purpose and unity of design point toward the same goal. We should aim to accomplish the inauguration of a system of state medical examinations that shall know no North or South, no East or West, but which shall recognise only the perfected harmony of a united whole. This I understand to be your chief aim and object—namely, by the confederation and unity of our honored profession, in its efforts to benefit mankind and advance the interests of its

1. From the *Bulletin of the American Academy of Medicine*, June, 1896.

own noble purpose, shall by its devotion to the welfare of its fellow-men when truly followed entitle it to Ben Adhem's motto, "leads all the rest."

Trusting your sojourn among us may be conducive to the pleasure and advancement of your association, again, gentlemen, permit me to welcome you to our hearts and homes.

The President invited Dr. James Mackintosh Hays, of Greensboro, N. C., Vice-President of the Confederation, to respond. Dr. Hays spoke as follows :

Mr. President: Through the partiality of our distinguished presiding officer, the pleasant duty has been assigned me of touching the button, so to speak, which is to set the machinery of this meeting in motion. I feel that I should be recreant to my trust, however, were I not first to thank the distinguished gentleman who has so cordially welcomed us to this beautiful city and extended to each of us its entire freedom. While, therefore, we are all grateful to him for this kind welcome, it really seems, in a certain sense, almost a work of supererogation to extend the hospitality of this city to any particular sect; for, within the last twelve months have we not all seen this "Gateway of the Sunny South" thrown wide open to every nation and kindred, tongue and tribe? And has not the whole world here enjoyed a hospitality in which the land of "Dixie" is found to excel?

Atlanta is not the pride of Georgia alone. Each of our states has its capital: Virginia is proud of her Richmond; the old North state points with a warm interest to her little capital nestling among the ancient and grand old oaks; but Atlanta is the pride of the whole South, and we glory with the Empire state in her magnificent schools, her medical colleges, her argentiferous *Constitution* and her auriferous *Journal*, her wonderful railroad facilities and her enormous mercantile establishments. Let me also congratulate Dr. Olmstead and his colleagues in their skilful fostering of obstetrical cases which enables Atlanta to double her population with clockwork regularity every ten years; so that while thanking Dr. Olmstead on behalf of our organisation for his charming words of welcome, I feel that I must be allowed also to join with him in extending the hospitality of this beautiful city to those of you who are not fortunate enough to have a home beneath our Southern skies.

And, Mr. President, permit me to say in this connection that you are now among a people who, while loving and revering the "conquered banner" as a sacred memory, are as loyal as any in this broad land to "Old Glory." Let but the call for volunteers under the old flag ever be made and the nations of the earth will be astonished at the magnificent response from our Southern boys. There is no state this side of Mason and Dixon's line that would not be glad to accept the commis-

sion singly and alone, at this very moment, to free poor bleeding Cuba from the mercenary grasp of that heartless monarchy whose name is synonymous with greed and gore.

Our meeting here, at this time, Mr. President, is peculiarly auspicious. We see representatives of the North and South, the East and West assembled in this room with a single purpose—namely, to elevate the standard of education in the noblest of all professions.

There is much to be accomplished. Our peculiar work is in almost virgin soil. I am proud of the fact that I represent the state which was the pioneer in establishing a separate examining board. The laws of the various states that have laws at all differ widely. The question of reciprocity should engage our most serious attention. It is not at all improbable that this very organisation will solve the problem of universal state laws—a consummation devoutly to be wished.

One of the most serious questions before us, too, is that of preliminary education. New York has set a splendid pace in this regard, and other states are very properly making an attempt to regulate that matter. It is the most serious problem that confronts us in North Carolina.

I had thought to touch on several of the more important subjects which should come before us, but by reference to the program I notice that the ground is wellnigh covered by able thinkers, and as time is precious I will now give way that the regular order may proceed.

At this point the confederation went into joint session with the American Academy of Medicine and the American Association of Medical Colleges, for the purpose of listening to a discussion on Medical education, arranged by the American Academy of Medicine, Dr. HENRY M. HURD, president, in the chair.

AFTERNOON SESSION—2.30 O'CLOCK.

The vice-president, Dr. JAMES MACKINTOSH HAYS, in the chair.

The president, Dr. WILLIAM WARREN POTTER, then delivered his annual address, choosing for his subject Relations of medical examining boards to the state, to the schools and to each other. (See age 938.)

Mr. JAMES RUSSELL PARSONS, Jr., of Albany, Director of Examinations University of the State of New York, upon invitation, then delivered an address on Preliminary education, professional training and practice in New York.

At the conclusion of Mr. Parsons's address, Dr. CHARLES A. L. REED, of Ohio, moved that the thanks of the confederation be tendered to Mr. Parsons for his able, comprehensive and instructive address. The motion was unanimously carried.

Dr. JOSEPH M. MATHEWS, of Louisville, expressed his high appreciation of Mr. Parsons's address and tendered his personal thanks to Mr. Parsons for coming such a long distance to attend this meeting and to present so superbly the work done by the great State of New York in advancing the standard of medical education. He wished to announce, however, that the smaller, yet great State of Kentucky, had also done a great work, though in a different manner. During a recent journey to Chicago and New York he was amazed to see upon almost every street corner advertisements of charlatans and quacks. And yet Illinois and New York had done almost more than any other states to improve educational methods in regard to medicine. He could, however, in contrast point with pride to Kentucky, where 1,150 quacks and charlatans had been driven across her borders and now Kentucky was free from the humiliation of their presence.

This announcement was greeted with great applause.

Dr. MATHEWS then read a paper entitled Limitations of the standard of modern educational requirements as determined by state medical examining boards.

Dr. CHARLES MCINTIRE, of Easton, Pa., next read a paper entitled Some obstacles to an inter-state recognition of a state license to practise medicine, with suggestions for their removal.

The VICE-PRESIDENT: We have listened with great pleasure and profit, I am sure, to the four carefully prepared papers that have been read this afternoon, all bearing more or less upon the same subject. The whole question is now open for consideration and I request Dr. Vander Veer to open the discussion thereon.

Dr. A. VANDER VEER, of Albany: Mr. Chairman, the four papers cover the ground so completely that it is almost impossible for anyone to take up each paper separately for discussion in a way that can add materially to what has already been said. Permit me to say, however, that I was greatly interested in each paper.

About fifteen years ago an effort was made, in which I took an active part, to have a law passed to bring about a more uniform system of teaching in the State of New York. After struggling four years with the legislature we finally succeeded in securing the passage of a law providing for the registration of physicians. It was well received by the profession, which encouraged us to go further. Looking to Illinois as our guide and citing the action of the Illinois state board of health as an illustration, we sought to impress the members of our legislature with the necessity of pass-

ing a law that would relieve the embarrassment presented by the fact that medical students would come from adjoining states and after attending two courses of lectures, of from ten to sixteen weeks each, would graduate and begin practice alongside of our own physicians, who had received much longer training. We first attempted to obtain a mixed board of state examiners, but the legislature said to us: "We have passed laws recognising three distinct medical societies in this state. We will encourage the passing of a law giving you a board representing each state medical society." After carefully considering this proposition the three several state societies, representing regular, homeopathic and eclectic medicine, were authorised to nominate each a state board of medical examiners. The appointing power was placed in the hands of the regents of the University of the State of New York. This law took effect in 1891, and we have been operating under it ever since. The results have been carefully and ably set forth by Mr. Parsons here today. In our last legislature no less than twenty-three bills relating to medical affairs were introduced, some of which were of a vicious nature, and one of which was a stealthy attempt to modify our present law relating to the preliminary requirements for medical students. Out of this group but one bill passed, however, which was the bill referred to by Dr. Potter and Mr. Parsons in their addresses, which establishes a four years' course after January 1, 1898.

I believe the members of our legislature are now alert and thoroughly alive to the necessity of supporting our medical practice act, hence in future it will not be easy for designing persons to secure improper amendments or additions. It will not be difficult, it seems to me, for other states to secure similar legislation, provided the medical profession sets itself at work on solid lines, manifesting an earnest desire to obtain good and wholesome laws and impressing the several legislatures with the importance thereof.

Our president gave us some excellent points in his address regarding the preliminary acquirements, medical collegiate training and final examination of students. I believe Dr. Potter presented very clearly and concisely the views of the profession in the State of New York on the subjects dealt with, and I commend them to the careful consideration of the members of this body.

Dr. WILLIAM S. FOSTER, of Pittsburg: I have been most pleasantly and profitably entertained in listening to the different addresses and essays bearing on the several points pertaining to

state medical examination for license that have been presented here today. In Pennsylvania we have adopted the New York standard of preliminary requirements, and we have a medical council, which, to all intents and purposes, exercises the function of the New York Board of Regents in the supervision of the issuance of licenses to practise medicine. I regret, however, that we have no protection in Pennsylvania against the quack unless he does some criminal act, and thus far it has been impossible to remedy this defect through adequate legislation.

Dr. CHARLES A. L. REED, of Cincinnati: It is a matter of very great regret on my part that I was unable to hear all the papers in their entirety, but I may be permitted to remark, judging from expressions I hear on all hands, that we are all moving on convergent lines toward the accomplishment of a definite purpose —namely, that of uniform state requirements for the legalising of the practice of medicine in this country. Having had but little opportunity of judging, I do not feel competent to discuss the details of this movement, but I beg you all to consider that we are not dealing with theories, but with conditions; that these conditions vary in different particulars in different states, and that each state and community presents its own peculiar problem. Finally, though I am fully committed to the principle of uniformity of methods and standards, I yet must urge that we move slowly and judiciously toward the accomplishment of that end, to which purpose I pledge my best efforts.

The papers were further discussed by Drs. J. E. Chancellor and R. W. Martin, of Virginia, and Mr. James Russell Parsons, Jr., of Albany.

The committee on constitution and revision of by-laws presented its report, which was unanimously adopted. (See *Bulletin, American Academy of Medicine*, December, 1895, page 350, also the JOURNAL, December, 1895, p. 407, for full report of this committee.)

The report of the secretary and treasurer was then read and made part of the proceedings of the meeting.

The chair having been duly authorised, appointed a committee of nomination, consisting of Dr. Perry H. Millard, of Minnesota, Dr. Joseph M. Mathews, of Kentucky, and Dr. William S. Foster, of Pennsylvania.

This committee subsequently reported the following-named as officers for the ensuing year, who were unanimously elected:

president, William Warren Potter, M. D., Buffalo, N. Y.; vice-presidents, Charles A. L. Reed, M. D., Cincinnati, O., J. N. McCormick, M. D., Bowling Green, Ky.; secretary and treasurer, A. Walter Suiter, M. D., Herkimer, N. Y.; executive council, Perry H. Millard, M. D., St. Paul, Minn., Joseph M. Mathews, M. D., Louisville, Ky., William S. Foster, M. D., Pittsburg, Pa., Hugh M. Taylor, M. D., Richmond, Va., Jas. Mackintosh Hays, M. D., Greensboro, N. C.

Dr. Perry H. Millard moved that a committee of five on minimum standard of requirements, to report next year, be authorised.

The president appointed the following committee on the minimum standard of requirements: Dr. Perry H. Millard, Minn., chairman; Drs. N. R. Coleman, O.; B. M. Griffith, Ill.; J. M. Hays, N. C., and Gardiner T. Swarts, R. I.

The following-named were elected to membership: Honorary, James Russell Parsons, Jr., Albany, N. Y.; William Osler, M. D., Baltimore, Md. Active, Charles McIntire, M. D., Easton, Pa.; John B. Roberts, M. D., J. C. Wilson, M. D., Frank Woodbury, M. D., H. A. Hare, M. D., Philadelphia, Pa.; A. Vander Veer, M. D., Albany, N. Y.; J. D. Spencer, M. D., Watertown, N. Y.; A. W. Suiter, M. D., Herkimer, N. Y.; H. M. Paine, M. D., West Newton, Mass.; Wm. E. B. Davis, M. D., Birmingham, Ala.; Geo. H. Rohé, M. D., Henry M. Hurd, M. D., Baltimore, Md.; J. A. Larrabee, M. D., C. W. Kelly, M. D., J. M. Bodine, M. D., D. S. Reynolds, M. D., L. S. McMurtry, M. D., J. A. Ouchterlony, M. D., Louisville, Ky.; Henry R. Hopkins, M. D., Buffalo. N. Y.; Hunter McGuire, M. D., Geo. Ben Johnston, M. D., Richmond, Va.; N. S. Davis, M. D., E. Fletcher Ingals, M. D., John B. Hamilton, M. D., Chicago, Ill.; Daniel Lewis, M. D., Albert L. Gihon, M. D., L. Duncan Bulkley, M. D., New York City, N. Y.; Brigadier-General Geo. M. Sternberg, Surgeon-General U. S. Army, Walter Wyman, M. D., Supervising Surgeon-General U. S. M. H. S., Washington, D. C.; W. F. Westmoreland, M. D., Atlanta, Ga.; John O. Roe, M. D., Rochester, N. Y.; J. D. Griffith, M. D., Kansas City, Mo.; E. S. Pettyjohn, Alma, Mich.; Geo. W. Stoner, M. D., U. S. M. H. S.

The next annual meeting was appointed at Philadelphia, to convene at 10 o'clock, A. M., Monday May 31, 1897.

The thanks of the Confederation were then tendered: First, to Dr. W. F. Westmoreland, chairman committee of arrangements, for many courtesies shown to the Confederation and its several

members during the meeting; second, to Mr. C. F. Dodge, manager of the Hotel Aragon, for the many comforts and conveniences provided the members, and for the free use of the assembly room, in which the meeting was held.

The president expressed himself as deeply grateful to the gentlemen who had come great distances to read papers and discuss the subjects presented at this meeting. This organisation, he said, though yet in its infancy, gave promise of increasing usefulness, and he hoped in bidding the members good-bye to meet them all in Philadelphia next year.

The meeting was then adjourned *sine die*.

BENJ. M. GRIFFITH, M. D., *Secretary*.

MEDICAL SOCIETY OF THE COUNTY OF ERIE.

Reported by FRANKLIN C. GRAM, M. D., Secretary.

THE semi-annual meeting of the Medical Society of the County of Erie was held Tuesday, June 9, 1896, in the rooms of the Buffalo Academy of Medicine, 617 Main street. The president, Dr. J. G. THOMPSON, called the meeting to order at 10.15 o'clock A. M. The minutes of the annual and of the special meetings were read and approved.

Dr. T. M. JOHNSON, of the committee on membership, reported in favor of admitting the following-named applicants to membership: Drs. H. C. Rooth, Martha F. Caul, Wellington G. Grove, Richard H. Satterlee, J. Grafton Jones, Simon Clug, John R. McCarthy, Chester T. Stewart, F. E. Luke, Henry Osthues and J. Henry Dowd. They were elected by unanimous vote.

Applications for membership were received from Drs. Jane N. Frear, Frederick W. Hayes, Edward E. Koehler, Earl P. Lothrop, E. T. Rulison, Albert E. Woehnert, Marion Marsh, Cora Billings Lattin and Henry W. Lattin. Referred to the committee on membership.

Dr. M. D. MANN, of the committee selected at the special meeting to attend a hearing before the state legislature in the interests of medical legislation, made a verbal report. He also presented a bill for $9.12, one-half of his expenses to Albany, the other half being paid by the University of Buffalo, which he also represented. Dr. Mann was tendered a vote of thanks and his bill was ordered paid.

Dr. ERNEST WENDE, of the committee appointed to consider the propriety and investigate the feasibility of establishing a professional home for the several medical societies of this county and city, reported that from a preliminary canvass made among physicians and interested citizens the committee considered the project entirely feasible. He, therefore, reported progress and asked for a continuance of the committee, which was granted.

Dr. J. B. COAKLEY, chairman of the Board of Censors, submitted the following report:

To the Medical Society of the County of Erie:

The Board of Censors respectfully presents its semi-annual report as follows:

At the time of our last report the case of D. R. Burton, of 1902 Niagara street, Buffalo, N. Y., a so-called faith healer, was laid before the society. We secured what we supposed would be sufficient evidence to procure an indictment under chap. 398 of the laws of 1895 and furnished the same to the district attorney, who brought the matter before the grand jury. After deliberating upon the case they failed to report an indictment.

In the minds of this board Burton is clearly violating the spirit, if not the letter, of this law. If the law has not been framed explicitly enough to cover such cases as this we feel that the fact should be made to appear clearly by an actual test, and the law then amended so as to secure successfully the object for which it was designed.

We feel that if we were authorised by this society to employ counsel to assist in working up this case more thoroughly and then in laying it before the district attorney and grand jury an indictment would probably be secured and a good test case made.

This board, equipped with proper legal assistance and working for the honor of the profession and the suppression of quackery, would probably be able to secure more decisive results than would follow if such cases were turned over for investigation entirely to the district attorney's office, already overcrowded with the multitude of matters and having no particular interest in the result beyond the proper performance of duty.

As previously reported, the district attorney has expressed to this board his distrust of the strength of the language and the definiteness of this law under which we seek to secure the conviction of faith-healers and the like. The defectiveness of this law, if such there be, can only be proved by a test case earnestly fought out in the courts.

We, therefore, recommend that the Board of Censors be authorised to employ counsel for the purpose of working up this Burton case

properly, or such other stronger one as may be found, and so of testing the strength of this recent law.

Under this law a first offense may be punished by a fine of not more than $250 or by imprisonment for six months, and a subsequent offense by a fine of not more than $500 or imprisonment for a year, or by both fine and imprisonment. We quote further from the same law as follows: "When any prosecution under this article is made on complaint of any incorporated medical society of the state or any county, medical society the fine when collected shall be paid to the society making the complaint, and any excess of the amount of fines so paid over the expense incurred by the said society in enforcing the medical laws of this state shall be paid at the end of the year to the county treasurer."

One other case was called to the attention of this board in April last by Dr. H. R. Hopkins—namely, that of Dr. Ballentine, under whose name an advertising business is being conducted at Room 4, Mooney building, Buffalo. We have thoroughly investigated this matter also and find that Dr. Ballentine is not personally in this city, but that there are three physicians practising in that office and representing Dr. Ballentine, all of whom are regularly licensed and registered, viz.: Dr. W. A. Crandall, registered April 6, 1896; Dr. T. V. Koons, registered April 10, 1896, both of whom are of the homeopathic school, and Dr. Lefferts M. Powell, registered March 31, 1896, of the eclectic school. While violating the ethics of the profession manifestly, and while it seems that their plan of action is merely to force druggists to keep Ballentine's remedies in stock, and though it is certainly reprehensible to physicians to lend themselves to such a scheme, we can find no violation on their part of the law of this state.

Respectfully submitted.

J. B. COAKLEY.
FRANCIS METCALFE.
MARCELL HARTWIG.
HENRY LAPP.

It was stated that there were some fifteen or twenty alleged physicians practising in Buffalo in violation of the law. Dr. Coakley said that those who knew of any such cases should communicate their information to the board in writing and they would be promptly investigated.

On motion the report was received and the recommendations therein were adopted.

Dr. J. J. WALSH stated that the committee appointed to consider the county hospital question had never held a meeting, and on his motion the committee was continued until the annual meeting.

The PRESIDENT stated that he had been requested to appoint

five delegates to represent this society in the Buffalo School Association, and had appointed as such Drs. H. R. Hopkins, William Warren Potter, Wm. C. Krauss, F. C. Gram and J. C. Green.

On motion the president's action was approved.

The SECRETARY stated that the papers read at the annual meeting were nearly all published and would soon be issued in pamphlet form to the members. He also read an acknowledgment from the State Board of Health of the resolutions endorsed at the annual meeting in connection with the question of tuberculosis among the Indians of this state.

Dr. NELSON G. RICHMOND, of Fredonia, N. Y., read a paper on Acute epiphysitis, which was discussed by Drs. Mynter, Hayd and Cronyn.

Dr. R. H. SATTERLEE'S paper on Refraction without mydriatics was discussed by Drs. Hubbell, Howe and Starr.

Dr. A. W. HURD, superintendent of the Buffalo State Hospital, read a paper on Early treatment of mental diseases, in which he also called attention to the new lunacy law. Drs. Krauss, Putnam and Crego discussed the subject.

Forced breathing and the pneumatic cabinet was the subject of a brief paper by Dr. J. H. Pryor. The discussion of this was led by Dr. Rochester.

Shortly after 1 o'clock P. M. the society adjourned.

ARMY MEDICAL EXAMINATIONS.

VACANCIES IN THE MEDICAL CORPS OF THE U. S. ARMY.

THERE are three vacancies in the Medical Corps of the U. S. Army, and it is expected that three more will occur during this year. An army medical board will meet in Washington early in October for the examination of candidates. The requirements for admission are as follows :

Permission to appear before the Board is obtained by letter to the Secretary of War, which must be in the handwriting of the applicant, giving the date and place of his birth and the place and state of which he is a permanent resident, and inclosing certificates, based on personal acquaintance, from at least two reputable persons as to his citizenship, character and habits. The candidate must be a citizen of the United States, between twenty-two and twenty-nine years old, of sound health and good character, and a graduate

of some regular medical college, in evidence of which his diploma will be submitted to the board. The scope of the examination will include the morals, habits, physical and mental qualifications of the candidate, and his general aptitude for service; and the board will report unfavorably should it have a reasonable doubt of his efficiency in any of these particulars.

The physical examination comes first in order, and must be thorough. Candidates who fall below sixty-four inches in height will be rejected. Each candidate will also be required to certify "that he labors under no mental or physical infirmity or disability which can interfere with the efficient discharge of any duty which may be required." Errors of refraction, when not excessive, and not accompanied by ocular disease, and when correctible by appropriate glasses, are not causes for rejection.

The mental examinations are conducted by both written and oral questions, upon—

I. Elementary branches of a common school education, including arithmetic, the history and geography of the United States, physics, ancient and modern history, and general literature. Candidates claiming especial knowledge of the higher mathematics, ancient or modern languages, drawing, analytical chemistry or branches of natural science, will be examined in those subjects as accomplishments, and will receive due credit therefor according to their proficiency.

II. Professional branches, including anatomy, physiology, chemistry, hygiene, pathology and bacteriology, therapeutics and materia medica, surgery, practice of medicine, obstetrics and the diseases of women and children.

Examinations will also be conducted at the bedside in clinical medicine and surgery, and operations and demonstrations will be made by the candidates upon the cadaver.

Hospital training and practical experience in the practice of medicine, surgery and obstetrics are essential to candidates seeking admission to the medical corps of the army, who will be expected to present evidence that they have had at least one year's hospital experience or the equivalent of this in practice.

To save unnecessary expense to candidates, those who desire it may have a preliminary physical examination and a mental examination in the "elementary branches of a common school education," by a medical officer of the army, stationed most conveniently for this purpose, who will act under instructions from the medical examining board.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITORS:

THOMAS LOTHROP, M. D. - - WM. WARREN POTTER, M. D.

All communications, whether of a literary or business nature, should be addressed to the managing editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

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THE MAY MEETINGS AT ATLANTA.

THERE is no more delightful portion of our country in May than the midsouth. In that season of the year there is a freshness of vegetation and a balminess of atmosphere saturated with the perfume of spring blossoms, all conspiring to make a journey to the region referred to specially attractive at that time. Hence it is not surprising that the group of medical meetings held at Atlanta last May was not only well attended but that it proved above the average in scientific excellence.

AMERICAN ACADEMY OF MEDICINE.

The series began with the meeting of this society, held May 2d and 4th, and we may truthfully affirm that this was one of the best meetings ever held by this distinguished body of physicians. The work doing by the academy in advancing the cause of higher medical education is not easy to estimate, but it is to be commended in the highest degree. Nearly all the papers and discussions at the late meeting were shaped in that direction and will exert a beneficial influence.

The erudite and indefatigable secretary of the academy, Dr. Charles McIntire, of Easton, Pa., deserves special praise for the methodical and skilful manner in which he is conducting the affairs of the academy. The *Bulletin* of the academy, which he so ably conducts, is becoming a magazine of influence, and every physician interested in the advancement of medical education in the United States, whether a member of the academy or not, should become a subscriber. In its columns will be found material nowhere else published, and as a work of reference it is invaluable, showing the

progress making in the medical reform to which it is specially devoted.

NATIONAL CONFEDERATION STATE MEDICAL EXAMINING AND LICENSING BOARDS.

The next body to convene was the Confederation of State Medical Examining and Licensing Boards, which met on Monday, May 4th. Though this organisation has had a nominal existence for four or five years, it is only now beginning to make itself felt according to its importance. Through a cohesive union of the several state boards in a national confederation much good may result in the direction of facilitating work, improving results and unifying and standardising methods.

The Atlanta meeting of this confederation, the proceedings of which we publish in another column, did much toward laying the foundation for a usefulness such as is outlined in the foregoing paragraph. One of the things which it certainly bids fair to accomplish is the preventing of inconsiderate acting in regard to a national examining board. Such a board certainly is not necessary under present conditions, and it clearly could have no right to endorse the licenses of state boards, thereby making them valid throughout the United States, until the states themselves establish a minimum level of requirements.

THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES.

The seventh annual meeting of this association was also held at Atlanta, May 4, 1896. Its first session was held in the morning in conjunction with the American Academy of Medicine and the Confederation of State Boards of Medical Examiners for the purpose of discussing methods of medical education in a series of papers prepared under the direction of the American Academy of Medicine. These papers will appear in full in the August issue of the *Bulletin* of the academy and should be read by every person interested in the subject.

At the afternoon session the president, Dr. William Osler, delivered his address, the report of the committee on syllabus was presented, the financial report of the secretary was read and other important business transacted. The election of officers resulted in bringing to the presidency Dr. J. M. Bodine, of Louisville, who is the dean of the University of Louisville, and a most capable and interested officer. The interests of the college association will be well served at the hands of Dr. Bodine.

THE AMERICAN MEDICAL ASSOCIATION.

This body convened on Tuesday, May 5th, and was presided over by Dr. Beverly Cole, of California. The addresses of welcome by Dr. John M. Ridley, of LaGrange, and John Temple Graves, Esq., of Rome, were two of the cleverest specimens of welcoming oratory to which we ever listened, and we only regret that limited space prevents their reproduction in these columns. Dr. Cole stirred the depths somewhat with his address, but it was reserved for Dr. Senn to furnish the *ad captandem* when he flayed the specialists, particularly the laryngologists and the gynecologists, by his "talk to the galleries" in his address on surgery. 'Tis ever thus with the general surgeon when he gets an opportunity to berate the specialist in pelvic and abdominal surgery before an audience from which there is no talking back.

The attendance, as shown by the registration, was fairly good in numbers and excellent in quality. The arrangements for the accommodation of guests were never better, while the hospitalities were royal, all under the direction of the chairman of the committee of arrangements, Dr. Willis F. Westmoreland.

THE SOUTHERN RAILWAY EXCURSION.

A fitting denouément to the hard work of the week was the excursion tendered by the officers of the Southern Railway to a number of invited guests, under the direction of Dr. C. M. Drake, chief surgeon. A train consisting of two directors' cars, three Pullman sleepers and a dining coach left Atlanta, Friday evening, May 8th, and landed the tourists at Lookout Mountain Saturday morning in season for breakfast. Leaving Lookout at 9.30 A. M., a call was made at the Tate Epsom spring via Knoxville, where a visit was paid at 5.30 P. M., and Hot Springs, N. C., was reached at 8 P. M., when dinner was served and where a delightful night was spent. Next morning a bath in the natural hot water was enjoyed by most of the guests, after which breakfast was served and the train moved forward to Asheville, which it reached in season for luncheon on Sunday. Here, too, post-prandium speeches were the order, when a number of the guests expressed their opinion of the treatment they were receiving at the hands of the Southern Railway. Messrs. W. A. Vaughan, H. M. Aiken and F. K. Huger, division superintendents, accompanied the party over their respective divisions and received the thanks of the tourists for their atten-

tions. Again boarding the train at 3 o'clock onward it sped over the mountains towards Salisbury, where at 8 o'clock the excursionists divided, some going northward and the remainder returning to Atlanta, reaching there Monday morning for breakfast. Before separating, however, the tourists presented Dr. Drake with an address and a suitable memento, to be arranged by Drs. A. Walter Suiter and Frank Woodbury as a committee. Thus ended one of the most delightful medical gatherings that it has been our privilege to enjoy.

THE MEDICAL DEPARTMENT OF NIAGARA UNIVERSITY.

HEREAFTER, the course of study in the Niagara Medical College will be extended to four years, including four courses of lectures.

Several changes have been made in the faculty, among which may be mentioned the following: Dr. Rollin L. Banta has been made associate professor of obstetrics; Dr. Carlton C. Frederick, associate professor of gynecology and clinical gynecology; Dr. Harry A. Wood, professor of materia medica and therapeutics and insanity; Dr. Eugene A. Smith, professor of principles of surgery, in addition to his former position; Dr. Edward M. Dooley, associate professor of anatomy; Dr. Walter D. Greene, professor of genito-urinary diseases; Dr. Louis A. Weigel, of Rochester, lecturer on orthopedy; Dr. David L. Redmond, lecturer on hygiene; Dr. Alfred E. Diehl, lecturer on dermatology; Dr. Sydney A. Dunham, adjunct professor of physiology; Dr. Lawrence G. Hanley, lecturer on obstetrics; Dr. John H. Daniels, lecturer on materia medica; Dr. Fred. S. Hoffman, instructor in anatomy; Dr. Wm. G. Taylor, instructor in obstetrics. Some other additions will yet be made and announced later.

The faculty has added a new office to its staff—namely, registrar, to which Dr. Hubbell has been elected. Dr. Harry A. Wood becomes secretary of the faculty.

Out of the twelve who graduated from this school at its last commencement, six have received hospital appointments. Drs. Burke, Walton and Mahoney are at the Sisters of Charity Hospital, Dr. Carr is at the Emergency, Dr. Smith at the Erie County, and Dr. Hughes at the State Hospital.

TOPICS OF THE MONTH.

AT THE FRENCH CONGRESS OF OPHTHALMOLOGY, recently held at Paris, Dr. Lucien Howe, of Buffalo, presided during its final meeting, May 7, 1896. It has been said that French physicians are jealous of their foreign confrères, but the choice of Dr. Howe to occupy the chair at the last session of this congress must be regarded not only in the light of a denial of such charge, but as a mark of courtesy to the United States. Dr. Howe, accepting the office in that spirit, declared that he looked upon it rather as an honor to his nation than to himself. He brought forward the question of precautions to be taken to prevent ophthalmia of the new-born, citing the fact that in several of the American states legislative action has been taken looking to the punishment of midwives if they do not give prompt notice to the public health authorities whenever this disease occurs within their knowledge. The French do not seem to think it possible to pass such laws in France, though they admit that the punishment of a few offenders would prove of benefit.

IN ANOTHER COLUMN we publish a notice of an examination to fill vacancies in the medical corps of the United States army. These vacancies offer a splendid opportunity for young men and they should be filled readily. In the present state of medical education recent graduates leave school better equipped than formerly, and they ought to find themselves well prepared for the army, navy, and marine hospital service examinations.

Personal.

DR. F. HUBBELL MILLS, of Buffalo, has removed from 160 Franklin street to 83 West Mohawk street. He also has an office in room 416, Ellicott Square. Hours at his residence: 8-9 A. M., 1-3 and 8 P. M. At Ellicott Square, 9-11 A. M., 4-6 and 7-8 P. M.

DR. EDGAR A. FORSYTH, of Buffalo, has removed from 159 Glenwood avenue to 64 West Huron street, corner Franklin. Practice limited to diseases of the nose and throat. Hours: 9 A. M. to 1 P. M. and by appointment.

DR. A. J. COLTON, of Buffalo, has removed from 151 East Ferry street to 27 East Ferry street, corner Otis place. Office hours: 8 to 9 A. M., 1 to 3 and 7 to 8 P. M.

Obituary.

DR. ORIN TODD, of Eminence Co., Ky., died Monday, May 4, 1896, at the Norton Infirmary, Louisville, aged 55 years. He practised medicine for nearly thirty years, and was well known throughout Kentucky. He had never married, but gave the devotion of his life to his profession.

Little hopes of his recovery were entertained from the time of his entrance into the Infirmary, and his numerous friends were not unprepared for the fatal termination. He was buried at Eminence, Ky., by the Odd Fellows.

His death was due to a pernicious form of pneumonia.

DR. HORACE HOYT, of East Aurora, died at his home in that village, Wednesday, June 17, 1896, aged 73 years. Dr. Hoyt was a native of East Aurora, received his preliminary education at East Aurora Academy, and graduated in medicine at Buffalo University Medical College in 1847. He practised medicine in his native place more than forty years, having retired from active work about ten years ago. His father, Dr. Jonathan Hoyt, came to East Aurora, July 4, 1817. In 1851 Dr. Hoyt married Sarah Josephine Ballard, who died in October, 1886. Four children survive, one of whom is William B. Hoyt, a well-known attorney of Buffalo. The others are Albert H. Hoyt, Orson L. Hoyt, and Jennie D. Hoyt, of East Aurora. At the time of his death Dr. Hoyt was one of the trustees of the City and County Hall.

Society Meetings.

THE Medical Society of the County of Chautauqua will hold its annual meeting at Chautauqua, N. Y., Tuesday, July 14, 1896, at 10 o'clock A. M., under the presidency of Dr. E. S. Rich, of Kennedy. A business and scientific program has been arranged for the morning and afternoon sessions by the secretary, Dr. C. A. Ellis, of Sherman. In the evening a banquet will be given at the Hotel Atheneum, which the ladies are specially invited to attend.

THE second Pan-American Medical Congress will convene in the city of Mexico, Tuesday, November 16, 1896, and continue four days.

Dr. William Warren Potter, of Buffalo, vice-president, will receive the titles of papers and furnish information concerning the congress to any who contemplate attending it.

A rare opportunity is afforded in connection with the congress to visit Mexico at a very low rate of fare, and these privileges apply to the families of all members who join the congress. It is important that the names of all such be promptly sent in to Dr. Potter at a reasonably early day.

Prof. Dr. Don Francisco Bastillos, Calle de Tacuba No. 7, Ciudad de Mexico D. F. Republaca Mexicana, has been elected treasurer of the congress, and all members residing in the United States and Canada and others who contemplate attending should forward the registration fee ($5 gold) to him at once and notify Dr. C. A. L. Reed, St. Leger place, Cincinnati.

THE Mississippi Valley Medical Association will hold its next meeting at St. Paul, October 20, 21, 22 and 23, 1896, under the presidency of Dr. H. O. Walker, of Detroit. The secretary, Dr. H. W. Loeb, of St. Louis, announces that Dr. H. N. Moyer, of Chicago, will deliver the address on medicine and Dr. Horace H. Grant, of Louisville, that on surgery. Dr. C. A. Wheaton, of St. Paul, is the chairman of the committee of arrangements, and it is announced that all railroads leading thither will offer reduced round-trip rates. The indications are that this will be a very large meeting.

THE American Public Health Association will hold its next annual meeting in the building known as Ellicott Square, Buffalo, N. Y., September 15–18, 1896, under the presidency of Dr. Eduardo Licéaga, of the city of Mexico. The executive committee, of which Dr. Ernest Wende is chairman, holds its meetings every Friday between 4 and 5 o'clock, P. M., at the Ellicott Club. It is important that all members of the committee attend promptly, as the meeting will adjourn its sessions positively at the hour named.

THE Lake Erie Medical Society will hold its regular quarterly meeting at Angola, Thursday, July 9, 1896. The secretary is Dr. W. W. Jones, Dayton, N. Y.

THE American Association of Obstetricians and Gynecologists will hold its ninth annual meeting in the Hotel Jefferson, at Richmond, Va., Tuesday, Wednesday and Thursday, September 22, 23 and 24, 1896, under the presidency of Dr. Joseph Price, of Philadelphia. The meeting promises to be a most interesting one. Mr. Lawson Tait, of Birmingham, Eng., has announced his intention to be present and participate in the proceedings. Other distinguished Fellows and guests will also attend. Dr. George Ben Johnston, of Richmond, is chairman of the committee of arrangements, who will secure hotel accommodations for the Fellows and their guests on application.

THE Buffalo Microscopical Club held its annual meeting at the library building, Monday evening, June 18, 1896, when the following list of officers was elected for the ensuing year: President, Dr. Herman G. Matzinger; recording secretary and treasurer, Dr. Jesse Shepard; corresponding secretary, Dr. Chauncy P. Smith; advisory council, Dr. Frank J. Thornbury, chairman, Dr. Wm. C. Krauss, Dr. Lee H. Smith. The annual address, entitled A Tribute to Pasteur, was delivered by Dr. Frank J. Thornbury, the retiring president. A meeting of the society will be held on the second Monday in August, to take action regarding the entertainment of the microscopical section of the American Association for the Advancement of Science, to convene in Buffalo, August 22 to 29, 1896.

Medical College Notes.

DENTAL DEPARTMENT, UNIVERSITY OF BUFFALO.—DR. R. H. Hofheinz, of Rochester, N. Y., has been appointed assistant professor to the chair of operative dentistry which is occupied by Dr. F. E. Howard, of Buffalo. Dr. F. J. Gieser has been appointed professor of chemistry and metallurgy, Dr. G. A. Himmelsbach, professor of general anatomy, and Dr. A. L. Benedict, professor of physiology.

PROFESSOR EDWIN KLEBS has been elected to the chair of pathology in Rush Medical College, Chicago.

This college recently has been recognised by the Examining Board of the Royal College of Physicians and the Royal College of Surgeons of London, England. This recognition entitles its alumni to all the privileges accorded to the graduates of other institutions recognised by that Board.

Book Reviews.

JOHNS HOPKINS HOSPITAL REPORTS. Vol. V. Contents: I. Malarial Fevers of Baltimore; II. Study of Some Fatal Cases of Malaria; III. Studies in Typhoid Fever. Baltimore: The Johns Hopkins Press. 1895.

This report is divided into three parts—namely, 1. The malarial fevers of Baltimore; 2. A study of some fatal cases of malaria; 3. Studies in typhoid fever.

The first part shows careful study and wide investigation of the subject, as the table of references to the main works treating of malarial fever since the recognition of its parasitic origin indicates 359 authors consulted. It is also finely illustrated with three lithographs made in Leipzig. Ten divisions, besides the preliminary remarks, appear under the first subject and embrace the general knowledge of the malarial organism—namely, the analysis of 616 cases of malarial fever; varietiesof the hematozoa observed in malarial fevers of Baltimore; thegeneral analysis of 544 cases in which the type of organism was clearly distinguished; analysis of the types of fever associated with infection, with the different types of organism; concerning the nature and significance of the crescentic bodies of Laveran; the flagellate bodies; and the action of quinine on the malarial parasite; the relative susceptibility of the negro is by nearly two-thirds less than that of the white population; three varieties of malarial parasite are distinguished—1. The tertian; 2. The quartan; 3. The æstivo-autumnal.

Under part second, four fatal cases of malaria are reported, three of which are of the æstivo-autumnal and one of the double tertian type of malarial infection. Two chapters follow upon The unequal distribution of the parasites in the body in malarial infection, and Phagocytosis in malaria. This part is also illustrated with four fine lithographs.

The third and last part is full of interest to the general practitioner. Five out of the ten chapters of Studies in typhoid fever are from the pen of Dr. William Osler. With the general analysis given, and a summary of the cases, is a description of the special features, symptoms, complications, five years' experience with the cold bath treatment and corresponding low death-rate.

Pyuria as a complication of typhoid is discussed and mention made of ten cases, in seven of which the colon bacillus was present, in two the typhoid bacillus and in one the staphylococcus albus.

Certain forms of infection in typhoid fever, by Dr. Simon Flexner, is a valuable chapter. So-called lymphoid nodules of the liver in typhoid fever, Neuritis during and after typhoid fever and Chills in typhoid fever are interesting contributions. The last

chapter is A study of the fatal cases : 1. Death by progressive asthenia ; 2. Death from intercurrent affections ; 3. Accidents of the lesion. This exhaustive report cannot fail to interest physicians everywhere. E. B. W.

THE TOXIC AMBLYOPIAS : THEIR SYMPTOMS, PATHOLOGY AND TREATMENT. By GEO. E. DE SCHWEINITZ, M. D., Clinical Professor of Ophthalmology, Jefferson Medical College, of Philadelphia. Octavo, 240 pages, forty-one engravings and nine full-page colored plates. Limited edition. De luxe binding, $4.00 net. New York and Philadelphia : Lea Brothers & Co., Publishers. 1896.

Within the past few years the different forms of blindness of diverse and unknown nature have gradually decreased in number, until today the amblyopias, especially of toxic origin, are becoming to be well understood and appreciated. Recently three monographs have appeared on the toxic amblyopias, those of Berger, 1892; Knies, 1893, and Casey Wood, 1894, to which is now added the volume before us, known as the Alvarenga prize essay.

De Schweinitz has studied carefully the effect of the different medicinal and toxic agents upon the terminal nerve fibers of the optic nerve, and has produced a most interesting and instructive essay. Of course, the bulk of the work pertains to the amamotic changes following the chronic use of alcohol and tobacco. The real cause of the blindness due to these agents was unknown until Samelsohn's discovery of a retrobulbar neuritis in 1882. Ostensibly the same lesion, interstitial neuritis, is found in other forms of alcoholic neuritis, occurring especially in the legs. Far more often than alcoholic, nicotine produces at times very acute symptoms of amblyopia, and the many instances and references given by the author are of much interest. The Turks and Spaniards, (Island of Cuba,) seem to enjoy a certain immunity from tobacco amblyopia, and withstand the evil influence of excessive inhalation of smoke. In the following chapters are discussed the effects of bisulphide of carbon, iodoform, the coal tar products, arsenic, lead, the anesthetics, caffein, thein, quinine, salicylic acid, the mydriatics and myotics, filix mas, ptomaines, meat-fist and sausage poisoning, serpent virus and the relation of hysteria to certain varieties of toxic amblyopia.

The visual fields accompany the cases reported by the author, while full-plate engravings of the neurotic changes in the optic nerve form an important feature of the work. The bibliography is unusually full and complete—care having been taken to have it verified. On the whole the subject has been masterly treated by the author, and must stand as a valuable addition to this nebulous and long misunderstood subject.

No less attractive is the beautiful manner in which the publishers have embellished the work. W. C. K.

MEDICAL JURISPRUDENCE, FORENSIC MEDICINE AND TOXICOLOGY. By R. A. WITTHAUS, A. M., M. D., and TRACY C. BECKER, A. B., LL. B., and a staff of collaborators. In four royal 8vo. volumes. Volume III. Forensic Medicine (continued). New York: William Wood & Co. 1896.

The third volume of this important work opens with a section on the medico-legal relations of vision and audition, and of injuries to the eye and ear, written by J. H. Woodward, M. D., professor of ophthalmology and laryngology in the University of Vermont. Professor Woodward devotes eight chapters, comprising 128 pages, to the consideration of his subject, thus making it a full and well-nigh complete exposition of a hitherto little understood branch of legal medicine. It will prove not only interesting to the medical jurist, but also to the ophthalmologist and otologist.

The next subject considered is the medico-legal aspect of insurance. This section comprises forty pages and is a product of the joint authorship of David Murray and Guy J. Edwords, of the New York bar. In dealing with the question of residence, the authors cite the following case of interest: When Boss Tweed made his escape from custody in September, 1875, he fled to Cuba and thence to Spain, where he was captured at Vigo. A suit on a policy of insurance taken out by him in 1868 was successfully resisted on the ground that he had violated the condition in the policy that he should not "without the written consent of this company, previously obtained, travel upon the high seas, except between coastwise parts of the United States."

We now come to a consideration of the medical aspects of insanity in its relations to medical jurisprudence, written by Edward D. Fisher, professor of nervous and mental diseases, University of the City of New York. Always an interesting writer, Dr. Fisher was never more so than in the 200 pages set apart to the consideration of this topic, perhaps the most difficult question in medical jurisprudence. Dr. Fisher's classifications are not only scientific but concise, while his definitions of the several subdivisions of insanity are at once learned and terse. This section will prove helpful in a high degree to every medical witness called to testify in regard to insanity.

Following the preceding in its natural order of sequence we find mental unsoundness in its legal relations treated of by Tracy C. Becker, one of the editors. Mr. Becker, who is accustomed to teaching, is a writer of great clearness and has done himself special credit in the 170 pages here presented to his readers. Testamentary law, so intimately related to this subject, is considered with some detail, while all through the section references to interesting illustrative cases are numerous. Both lawyers and doctors will find instructive research in this section.

Finally, we note that the care and custody of incompetent persons and their estates is dealt with by Mr. Goodwin Brown, of the New York state lunacy commission, in a section of 145 pages. In

this we find a digest of the statutes of all the states relating to the subject matter of this section, compiled by Frank D. Gilbert, of the New York statutory revision commission, which will prove of special interest to lawyers. The volume closes with a table of cases cited and an ample index. It is a fitting complement to those that have preceded it and is a continuation of a superb and comprehensive treatise.

TWENTIETH CENTURY PRACTICE. An International Encyclopedia of Modern Medical Science. By Leading Authorities of Europe and America. Edited by Thomas L. Stedman, M. D., New York City. Twenty volumes. Volume V. Diseases of the Skin. New York: William Wood & Co. 1896.

As has already been explained in these pages, the publishers found it necessary to issue Volume VI. out of its regular order, hence it appeared and was noticed previous to the present number.

The volume under consideration is devoted entirely to diseases of the skin and is the largest single volume set apart to this subject that has yet appeared. The first section treats of the anatomy of the skin and its appendages, and is prepared by Charles W. Allen, of New York. The author gives a succinct account of the subject in well-chosen terms.

The next subject treated is parasitic diseases and is written by L. Duncan Bulkley, also of New York, who by heredity and education is a dermatologist par excellence and an author with facile pen and fluent thought. A knowledge of parasitic diseases is alike necessary to the general physician and the dermatologist; both will find them here discussed in their latest light.

We next come to a section on erythematous affections, written by Henry H. Whitehouse, also of New York. This is followed by a section on eczema and dermatitis by James Nevins Hyde, of Chicago. A knowledge of the multifarious manifestations of the quite common disease known as eczema is essential for the practitioner of general medicine and he should study its history, manifestations and treatment as set forth by Hyde with assiduity.

Next follow in consecutive order sections devoted to squamous affections by H. Radcliffe Crocker, of London; papular affections by L. Brocq, of Paris; bullous affections by Henry H. Whitehouse, of New York; pustular affections by the same author; phlegmonous and ulcerative affections by Crocker; diseases of the sebaceous glands and diseases of the sweat glands by Arthur Van Harlingen, of Philadelphia; diseases of the hair and nails (this latter of great importance and well handled) by Douglass W. Montgomery, of San Francisco. Then follows an important section in which benign neoplasms are considered in much detail by John T. Bowen, of Boston. Moris Kaposi, of Vienna, contributes a short but well-illustrated section devoted to the consideration of xeroderma pigmentosum.

Finally, the dermatoneuroses are taken up by H. Leloir, of Lille, the consideration of which continues to the end of the volume. Such a treatise on dermatology is a marvel in design and execution and challenges admiration for authors, editor, and publishers.

NEW YORK STATE COMMISSION IN LUNACY. Sixth Annual Report, October 1, 1893, to September 30, 1894. T. E. McGarr, secretary. Transmitted to the Legislature May 24, 1895. Albany: James B. Lyon, State Printer. 1895.

This excellent report sets forth the workings of the state hospitals for the insane for the period indicated in the title. It merits the careful examination of every physician or other person interested in or engaged in the care of lunatics. The economics of the system, as applied to the state of New York, are well digested and considered in detail. It is the most complete report on the subject that has yet been issued.

INTERNATIONAL CLINICS. A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and specially prepared articles on treatment. By professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by Judson Daland, M. D., (Univ. of Penna.) Philadelphia, Instructor in Clinical Medicine and Lecturer on Physical Diagnosis in the University of Pennsylvania; Assistant Physician to the Hospital of the University of Pennsylvania; Director of the Stetson Laboratory of Hygiene; Fellow of the College of Physicians of Philadelphia. J. Mitchell Bruce, M. D., F. R. C. P., London, England, Physician to, and Lecturer on, the Principles and Practice of Medicine at the Charing Cross Hospital. David W. Finlay, M. D., F. R. C. P., Aberdeen, Scotland, Professor of Practice of Medicine in the University of Aberdeen; Physician to, and Lecturer on, Clinical Medicine in the Aberdeen Royal Infirmary; Consulting Physician to the Royal Hospital for Diseases of the Chest, London. Volume I. Sixth series. 1896. Royal 8vo, pp. xii.—344. Philadelphia: J. B. Lippincott Co. 1896.

In the first volume of the sixth series we find a continuation of the same system that has pervaded these clinics since their introduction to the profession several years ago, with the addition of specially prepared articles on treatment. These latter will prove of interest to younger physicians. The Buffalo contingent contributing to this volume is composed of Drs. Benedict, Mann, Park and Stockton. We find also the following prominent names among the contributors: Drs. Clinton Cushing, San Francisco; H. H. Grant and Joseph M. Mathews, Louisville; Prof. Potain, Paris; Dr. John B. Roberts, Philadelphia; Granger Stewart, Edinburg; Prof. Vulliet, Geneva (now deceased), and Dr. James T. Whitta-

ker, Cincinnati. There are a number of others, but we have not space to mention all.

This volume is quite well illustrated and will easily find its way to the bookshelves of progressive physicians.

HAND-BOOK FOR HOSPITALS. By ABBY HOWLAND WOOLSEY, Member of the Committee on Hospitals, State Charities Aid Association. No. 32 New York State Charities Aid Association Series. Third edition. Price, $1.00. New York: G. P. Putnam's Sons, 27 West Twenty-third street. 1895.

The revision of this useful manual was placed in the hands of Drs. Hitchcock, Wheelock and Wylie, who have carefully done their work. The opening chapter is useful alike to large and small hospitals. The paragraphs on art of planning are especially valuable. The hospital buildings are considered in chapter II., the air supply, heating, drainage and water supply in chapters III. and IV. In chapters VII. and VIII. the matron and head nurse can find hints which must be of service to them, and it is to be hoped that all nurses who read the section on coöperation in hospital work will profit thereby. Chapter XII., on disinfection, is thorough, but not up to date. The appendix gives the rules and general laws governing some of our largest and best conducted hospitals. The volume commends itself to all interested in hospital work.

L. C. R.

A TEXT-BOOK UPON THE PATHOGENIC BACTERIA, for Students of Medicine and Physicians. By JOSEPH MCFARLAND, M. D., Demonstrator of Pathological Histology and Lecturer on Bacteriology in the Medical Department of the University of Pennsylvania; Pathologist to the Rush Hospital for Consumption and Allied Diseases. Octavo, pp. 359. With 113 illustrations. Price, $2.50 net. Philadelphia: W. B. Saunders, 925 Walnut street. 1896.

A new text-book on bacteriology in these days of prolific publication needs some distinguishing features to make it a success and acceptable to the student world and profession at large. The author of this work has departed from the beaten paths and has produced a work of great benefit and convenience to the busy practitioner, serving at the same time as a text-book invaluable to the laboratory students.

The pathogenic bacteria only are discussed by the author. The first part of the book conveys to the reader a concise account of the technical procedures necessary in the study of bacteriology and a brief description of the life history of the important pathogenic bacteria.

Part two is devoted to the different infectious diseases resulting from well-known bacteria, with the origin of symptoms and cause of death. It seems very desirable to have a work where one can turn to any infectious disease, as tuberculosis, for instance, and

study the etiology and pathology from the bacterial point of view, the bacteria being secondary to the disease. In the same way are discussed chronic inflammatory diseases, glanders, leprosy, syphilis, actinomycosis, mycetoma, farcin du boeuf and rhinoscleroma. Under the toxic diseases are discussed diphtheria, tetanus, rabies, anthrax, typhoid fever, cholera and pneumonia, while under the septic diseases are discussed relapsing fever, influenza, malignant edema, measles, bubonic plague, tetragenus, chicken cholera, mouse-septicema, anthrax and typhus murium. The descriptions are all well rendered, clear and concise, the illustrations carefully selected and the result is a most commendable little volume.

The typographical work is admirably executed. W. C. K.

AN ATLAS OF OPHTHALMOSCOPY. With an Introduction to the Use of the Ophthalmoscope. By DR. O. HAAB, Professor of Ophthalmology, University of Zurich. Translated and edited by Ernest Clarke, M. D., B. S. (Lond.), Fellow of the Royal College of Surgeons; Surgeon to the Central London Ophthalmic Hospital; Ophthalmic Surgeon to the Miller Hospital, etc. Duodecimo. With wood-cuts and sixty-four colored plates. Price, $3.50. New York: William Wood & Co. 1895.

This atlas is preëminently a work for the student of ophthalmoscopy. In the introduction is given brief instruction in the use of the ophthalmoscope, embodying an explanation of the instrument; how to use it by both the direct and indirect methods; the measurement of errors of refraction; the determination of the size of the ophthalmoscopic image and of inequalities in the fundus; the application of the shadow test; the method of conducting an ophthalmoscopic examination, and the ophthalmoscopic appearance of the normal fundus. These subjects are treated very concisely, but clearly, and in a manner suited to the needs of a beginner.

Following the introduction is a series of well-executed colored plates, sixty-four in number, containing eighty-six figures illustrating the more common appearances seen in healthy and diseased fundi. The various aspects of the normal fundus are shown by seven figures; of congenital malformations, by eight; of diseases of the optic nerve, by fourteen; of diseases of the retina, by forty-one; of diseases of the choroid, by sixteen. Facing each plate is a description of it, which greatly facilitates its study. The volume is in a most convenient size and can easily be carried to the clinic room in the pocket.

The convenient size, the subject matter, the well-drawn plates, and the large number of fundus pictures portrayed, render this volume of superior value to the student. The translator, Mr. Clarke, of London, and the publishers have done the profession great service in putting in English dress this excellent work of Dr. Haab. A. A. H.

INFANTILE MORTALITY DURING CHILDBIRTH AND ITS PREVENTION. By A. BROTHERS, B. S., M. D., Visiting Gynecologist to Beth Israel Hospital, New York; Attending Gynecologist to the New York Clinic for Diseases of Women; Instructor in Operative Gynecology at the New York Post-Graduate Medical School and Hospital, etc. Octavo, pp. viii.—179. Price, $1.50. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1896.

The merit of this work is established by the fact alone that it secured the Jenks prize. The volume is of interest not alone to the pediatrist but to the obstetrician as well. It is divided into twenty-eight chapters, the first four of which consider general facts relating to morbid anatomy, the accoucheur, statistics, and the like; chapters V. and VI. consider infantile mortality due to maternal causes preceding labor; chapters VIII. to XX. consider causes for such mortality during labor; chapters XX. and XXI. fetal causes preceding labor; chapters XXII. to XXVIII. fetal causes during labor; chapters XXIX. to XXXVII. fetal causes following labor; the last chapter gives general considerations on prevention of infantile mortality.

The perusal of this monograph will repay the general practitioner as well as the specialist. L. C. R.

TRANSACTIONS OF THE FIRST PAN-AMERICAN MEDICAL CONGRESS, held in the City of Washington, D. C., U. S. A., September 5, 6, 7 and 8, 1893. In two volumes. Edited by CHARLES A. L. REED, M. D., Secretary-General, Cincinnati, O. Washington: Government Printing Office. 1895.

After a rather protracted delay the transactions of the first Pan-American Congress are now before the profession and present a formidable addition to our stock of medical literature and knowledge. The general scope of the Congress as well as the papers presented at the meetings have been so frequently referred to in these columns that a repetition seems unnecessary. The transactions are carefully edited, the plates and engravings fairly well executed, but the paper and print are considerably below those offered by some of the large eastern publishers. Inasmuch as the Government is the printer and publisher and Congress the distributor, the profession ought to overlook such small defects.

Physicians not belonging to the congress may possibly obtain these transactions by applying to their congressman, and they are well worth a place on the library shelf. W. C. K.

PROCEEDINGS of the Orleans Parish Medical Society for 1894. Augustus McShane, M. D., secretary. Vol. II. New Orleans. L. Graham & Son, Printers. 1895.

This volume contains the reports of the routine business of the society, together with reports and discussions of several interesting scientific articles.

ATLAS OF TRAUMATIC FRACTURES AND DISLOCATIONS. With a Brief Treatise. By H. HELFERICH, M. D., Professor at the University of Greifswald. With 166 illustrations, after original drawings by Dr. Joseph Trumpp. New York: William Wood & Co. 1896.

Fractures and dislocations furnish the Scylla and Charybdis of the young practitioner of medicine. In this book both he and the student entering upon this important field of surgery will find an opportunity to study the subjects with that anatomical detail that is so necessary to their clear understanding. The drawings for the most part are original, made by the author from recent specimens and demonstrate the several branches of the subject with unusual clearness. The aid of such a work to the student and to the graduate just entering upon the practice of surgery is beyond calculation and stands nowise in relation to its cost price. It does not take the place of clinical studies, nor of such a classic treatise as Hamilton's, but it is a most useful adjunct to those two indispensable methods of acquiring knowledge on the subject of fractures and dislocations.

A TREATISE ON THE DISEASES OF INFANCY AND CHILDHOOD. By J. LEWIS SMITH, M. D., Clinical Professor of Diseases of Children in the Bellevue Hospital Medical College, New York. New, eighth edition, thoroughly revised and rewritten and much enlarged. Octavo of 983 pages, with 273 illustrations and four full-page plates. Cloth, $4.50; leather, $5.50. New York and Philadelphia: Lea Brothers & Co., Publishers. 1896.

A medical text-book whose success warrants the issuance of an eighth edition hardly demands a review. It may be considered a classic. The new edition of this work has been enlarged by nearly one hundred pages. The text shows careful revision, some chapters having been entirely rewritten, as for instance that on rickets. The chapter on diphtheria marks one great advance in medicine in the last five years, the tentative views of 1890 contrasting forcibly with the positive statements of 1895.

Several new chapters appear, among them one on myxedema, a second on blood diseases, a third on diseases and injuries of bone and a fourth on diseases of the heart. These and other additions give the book a completeness as a work on pediatrics which the older editions certainly lacked, and brings up to date a treatise which has long been regarded standard. M. J. F.

PROCEEDINGS of the Twenty-first and Twenty-second Annual Meetings of the Oregon State Medical Society, held at Portland, May 31, June 1, 2, 1894, and June 11 and 12, 1895. Volume XX. Edited by E. F. Tucker, M. D., secretary, Portland. 1895.

The book contains full reports of the papers read at the annual meetings of '94 and '95, together with discussions of the same. It is an interesting collection of medical essays, covering a considerable range of topics.

ELECTRICITY IN ELECTROTHERAPEUTICS. By EDWIN J. HOUSTON, PH. D., and A. E. KENNELLY, Sc. D. Price, $1.00. New York: The W. J. Johnston Company, 253 Broadway. 1896.

This little volume of 402 pages gives in a concise form the fundamental principles of electricity. It describes at length the various cells in use with special reference to their advantages and disadvantages for medical purposes. This chapter and the following one on the laws governing the strength of current are especially commendable. The various induction coils, kinds of static machines, ammeters, commutators, cautery knives and incandescent lamps now in use, are fully discussed. The special electrodes and apparatuses for topical application are not described; in fact, the book is purely technical and does not enter into exact methods of therapeutical application. It is written clearly and concisely, and fulfils the purpose for which it was written. It is printed on good paper and contains 128 illustrations that are well executed. H. K.

TRANSACTIONS OF THE STATE MEDICAL SOCIETY OF WISCONSIN FOR THE YEAR 1895. Volume XXIX. Constitution and by-laws and list of members. Charles S. Sheldon, M. D., secretary. Madison, Wisconsin: Tracy, Gibbs & Co., Printers and Stereotypers. 1895.

This record of the forty-ninth meeting of this society is most satisfactory. It contains fifty-seven papers, many of which were interestingly and instructively discussed. The secretary has performed his work in a thorough-going manner. No medical society can prosper unless its secretary has executive capacity and literary ability. Both of these qualifications are demonstrated in the book before us. As is the case with most state medical societies, however, the number of members in attendance at this meeting was comparatively small. The medical profession very generally seems apathetic in regard to its state societies, a condition we hope to see improved as the years advance. The state medical society influences the medical status of the profession and in a large measure controls medical legislation; hence it should enroll upon its membership list a large proportion of its resident medical population.

THERAPEUTICS OF INFANCY AND CHILDHOOD. By A. JACOBI, M. D., Clinical Professor of the Diseases of Children in the College of Physicians and Surgeons (Columbia University), New York; President of the Association of American Physicians; late President of the New York Academy of Medicine and of the Medical Society of the State of New York, etc. Small 8vo, pp. 518. Philadelphia: J. B. Lippincott Co. 1896.

Much which this book contains has already been presented by the author in essays and monographs which have appeared from time to time. Some of the articles, we judge, have hardly been retouched in this volume.

The feeding of sick children occupies the first chapter of the book. In his methods of infant feeding Dr. Jacobi differs widely from many pediatrists, but he gives a logical reason for the faith that is in him and his wide experience entitles his views to respect. In the preface the writer states that he believes in medicines, hence throughout the book one finds stress laid on the action of drugs beyond what is usual in works on pediatrics. This feature makes the book a valuable supplement to more pretentious volumes which slight the medicinal treatment of disease. The good sense of the author is shown all through the book, noticeably in his remarks on circumcision in the chapter on diseases of the genito-urinary organs.

Though writing on therapeutics, the author enters sufficiently into etiology and diagnosis to make clear the rationale of his treatment. Altogether, the physician who possesses this book will feel that he has an experienced and sensible consultant who does not hesitate to teach by his mistakes as well as by his achievements.

M. J. F.

TRANSACTIONS OF THE COLORADO STATE MEDICAL SOCIETY. Twenty-fifth annual convention, held in Denver, Col., June 18, 19, 20, 1895. By-laws and list of members. Edwin R. Axtell, M. D., secretary. Denver, Col.: Published for the Society.

This handsome volume indicates the progressiveness of the medical profession of this growing commonwealth. The papers are excellent in form and embrace almost every kind of disease in medicine and surgery, and some of the discussions are also spirited and able. A unique feature of this book consists in publishing half-toned portraits of the twenty-five ex-presidents of the society, six of whom are deceased. The value of this portrait gallery will become inestimable in after years. The book is handsomely printed and well bound.

AN ATLAS OF THE NORMAL AND PATHOLOGICAL NERVOUS SYSTEMS, together with a Sketch of the Anatomy, Pathology and Therapy of the same. By DR. CHRISTFRIED JAKOB, practising physician in Bamberg; formerly First Assistant in the Medical Clinic at Erlangen. With an introduction by Prof. Dr. Ad. v. Strümpell. Translated and edited by Joseph Collins, M. D., Instructor of Mental and Nervous Diseases at the New York Post-Graduate Medical School. New York: William Wood & Co. 1896.

The publishers are to be congratulated for securing as translator of this work so able and competent a man as Dr. Joseph Collins, whose knowledge of the subject and of the language enable him to add materially to the worth of the volume.

It is divided into five parts, part one treating of the morphology of the central nervous system; part two, of the development and structure of the nervous system; part three, of the topographical anatomy of the nervous system; part four, of the general patho-

logical anatomy of the nervous system; and part five, of the special pathology of the spinal cord and the peripheral nerves. Seventy-eight full-page plates, many containing from one to five figures, besides numerous figures in the text, constitute the working basis, the text serving to elucidate the plates rather than the plates to elucidate the text, as is generally the case.

The figures are nicely executed, many in colors, while some are so arranged as to show different layers or different depths of the brain.

If the other volumes of the series are as valuable and attractive as this one, the publishers may expect hearty appreciation from the profession for their labors and efforts. W. C. K.

OBSTETRICAL POCKET PHANTOM. By DR. K. SHIBATA, Specialist in Gynecology and Obstetrics, Tokio, Japan; Physician to the Woman's Clinic at the University of Munich. Preface by Prof. Franz von Winckel. With eight illustrations, one pelvis and two jointed manikins. Translated from the third edition by Ada Howard-Andenried, M. D., Physician to the Children's Clinic at the Woman's Hospital, Philadelphia. Price, $1.00. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1895.

This booklet of twenty pages gives in the text all the presentations and positions in concise form. There is an accompanying pasteboard pelvis and two jointed pasteboard phantoms, one with the fetus received from the side, the other from the front.

They will prove very useful to students, midwives and nurses in demonstrating the mechanism of labor where a manikin and fetus would not be obtainable, and might perhaps be of service in the pocket of the every-day practitioner. In the preface of the first edition Prof. F. von Winkel, of Munich, says it "may serve as a convenient and inexpensive substitute for the pelvis and manikin." E. C.

FORMULAIRE DES MEDICATIONS NOUVELLES, par le DR. H. GILLET, ancien interne des hôpitaux de Paris, chef du service des maladies des enfants à la Polyclinique de Paris. 1 vol. in 18 de 280 pages, avec fig., cart. 3 fr. Paris: J.-B. Baillière et Fils, 19 rue Hautefeuille (près du boulevard Saint-Germain). 1896.

This little book, published only in the original French, contains much valuable information regarding applied medicines, particularly local antiseptics and injections of serum of various kinds, antitoxines and medicinal agents, such as the soluble mercurial salts, applied subcutaneously, by intravenous injections, and directly to the organs themselves as intrapulmonary injections. There are several interesting sections on the different extracts, and juices, such as thyroid extract, testicular extract or Sequardine. The articles are condensed and very systematically arranged. Under the title Principe de la methode is explained the direct idea which has given birth to the new medication; then are indi-

cated the nature of the medication, the mode of administration and doses; in some instances the effects and contraindications are given, and some formulæ.

Among the most instructive articles are those under the following headings: Antisepsis of the upper digestive and respiratory tracts; Antisepsis of the nasal fossæ; Antisepsis of the stomach and intestines; Lavage of the stomach; Antisepsis of the skin; Cold baths; Intrapulmonary injections; Anti-tuberculous serums; Sequardine or testicular extract. J. N. F.

PROCEEDINGS OF THE TWENTY-SECOND SESSION OF THE FLORIDA MEDICAL ASSOCIATION, held at Gainesville, Fla., April 16, 17 and 18, 1895. Edited by J. D. FERNANDEZ, M. D., Secretary.

This association in the publication of this brochure of 128 pages demonstrates its activity and scientific *esprit de corps*. In addition to the proceedings, that occupy thirty-four pages of the pamphlet, eighteen medical papers are published, dealing with almost every department of medicine. It is a creditable showing for the Floral state.

DIETS FOR INFANTS AND CHILDREN IN HEALTH AND DISEASE. By LOUIS STARR, M. D., Editor American Text-book of the Diseases of Children. Price, $1.25 net. Philadelphia: W. B. Saunders, 925 Walnut street. 1896.

This little book is made up of detachable leaves, on which are printed the diet lists for children, sick and well, ranging in age from birth to late childhood. On the leaves prepared for younger children the ingredients only are given, the quantities of each being left for the physician to determine. Space is also left for hygienic directions. Detachable recipes for various broths, and the like, are also included in the volume, which should prove very helpful, insuring as its use would an accurate understanding of the physician's orders concerning the child's feeding and general management.

THE JOHNS HOPKINS HOSPITAL REPORTS. Volume IV., No. 9. Report in Pathology. Deciduoma Malignum. By J. WHITRIDGE WILLIAMS, M. D. Baltimore: The Johns Hopkins Press. 1895.

This report is devoted entirely to a case of deciduoma malignum and is the first authentic case yet reported in America or England, although many cases have been reported on the continent. Sänger, in 1888, first reported a case of this kind in a 23-year-old woman, who aborted in the eighth week and died seven months later with four large, soft, spongy, reddish tumors in the uterine wall and metastasis of the same character in the lungs, diaphragm, tenth rib and right iliac fossa. Microscopically the neoplasm appeared to be a malignant metastasising deciduoma, belonging to the sarcoma group.

The case in question resembles closely that of Sänger's in its gross appearance and clinical history, but differs very essentially from it in its firmer structure. Both present the same alveolar structure and are characterised by their markedly hemorrhage nature; but Sänger's new growth is composed of decidual cells while Williams's is made up of allular elements whose significance is not beyond all question.

The author then discusses carefully the nature and histogenesis of the mass and compares it with the various new growths which have been described as malignant deciduoma. The frequency, clinical history, etiology, diagnosis and treatment are also considered.

A complete bibliography and a double-page plate accompany the article. W. C. K.

TRANSACTIONS of the Texas State Medical Association. Twenty-seventh annual session, held at Dallas, Texas, April 23, 24, 25, 26, 1895. H. A. West, M. D., secretary. Galveston, Texas: Knapp Bros., Printers and Publishers. 1895.

The book contains the list of officers for the year 1895-6, the constitution and by-laws of the association and minutes of the twenty-seventh annual meeting. The papers read at this session are reported in full. A picture of Dr. P. C. Coleman, the president, faces the title page.

BOOKS RECEIVED.

A Text-book of Bacteriology. By George M. Sternberg, M. D., LL.D., Surgeon-General U. S. Army, ex-President American Public Health Association, etc., 8vo, pp. 693. Illustrated by Heliotype and Chromolithographic plates and 200 engravings. Price, $5.00. New York: William Wood & Company. 1896.

The Diagnosis and Treatment of Diseases of the Rectum, being a practical treatise on fistula, piles, fissure and painful ulcer, procidentia, polypus, stricture, cancer, etc. By William Allingham, F. R. C. S., England; ex-Member of Council of the Royal College of Surgeons of England; late Senior Surgeon to St. Mark's Hospital for Diseases of the Rectum, etc., and Herbert W. Allingham, F. R. C. S., England. Surgeon to the Great Northern Hospital, etc., 8vo, pp. xvi—485. Sixth edition. New York: William Wood & Company. 1896.

A Manual of Anatomy. By Irving S. Haynes, Ph. B., M. D., Adjunct Professor and Demonstrator of Anatomy in the Medical Department of the New York University; Visiting Surgeon to the Harlem Hospital, etc., 8vo, pp. 680, with 134 half-tone illustrations and 42 diagrams. Price, $2.50 net. Philadelphia: W. B. Saunders, 925 Walnut street. 1896.

Borderland Studies. Miscellaneous Addresses and Essays pertaining to Medicine and the Medical Profession, and their Relations to General Science and Thought. By George M. Gould, A. M., M. D., formerly

editor of the Medical News. Price, $2.00. Philadelphia : P. Blakiston, Son & Co., 1012 Walnut street. 1896.

How to Feed Children. A Manual for Mothers, Nurses and Physicians. By Louise E. Hogan. Price, $1.00. Philadelphia : J. B. Lippincott Company. 1896.

A Compend of Gynecology. By William H. Wells, M. D., Adjunct Professor of Obstetrics and Diseases of Infancy in the Philadelphia Polyclinic, etc. Quiz Compends, No. 7. Duodecimo, with 150 illustrations. Price, 80 cents. Philadelphia : P. Blakiston, Son & Co., 1012 Walnut street. 1896.

A Compend of Diseases of Children. Especially adapted for the use of Medical Students. By Marcus P. Hatfield, A. M., M. D., Professor of Diseases of Children, N. W. U. Medical School, etc. Quiz Compends, No. 14. Duodecimo, second edition, thoroughly revised. Price, 80 cents. Philadelphia : P. Blakiston, Son & Co., 1012 Walnut street. 1896.

Merck's 1896 Index. An Encyclopedia for the Physician and Pharmacist. Price, $5.00. Merck & Co., New York.

The Three Ethical Codes. That of the American Medical Association ; Its Constitution, By-laws, Amendments, etc. That of the American Institute of Homeopathy and that of the National Eclectic Medical Society. Limp cloth, round corners, 55 pages, postpaid 50 cents. The Illustrated Medical Journal Co., Publishers, Detroit, Mich.

Medical and Surgical Report of the Presbyterian Hospital in the City of New York. Volume I., January, 1896. Edited by Andrew J. McCosh, M. D., and Walter B. James, M. D. New York : The Knickerbocker Press.

Literary Notes.

THE *Medical Record*, issued June 13, 1896, is liberally devoted to the consideration of summer health resorts, and is adequately named a Summer Health Resort Number. It is considerably increased in size and has an illuminated cover in antique laid paper typical of this special edition. In addition, it contains a number of illustrated advertisements of the principal summer health resorts, and is altogether the handsomest specimen of weekly medical magazine art that we have seen in many a day.

A CURIOUS decision relating to American degrees is reported in England. Justices Grantham and Collins, eminent judges of the high court of justice of England, decided in a case of the Medical Defense Union vs. Bridgewater that having invariably added the letters U. S. A. after the title M. D. there was no intent to defraud, hence no cause of action at law. The Union is mulcted in about $4,000 costs. It appears that Bridgewater is an American physician holding diplomas from New York and Philadelphia medical colleges. This decision puts a new color on the American diploma question.

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